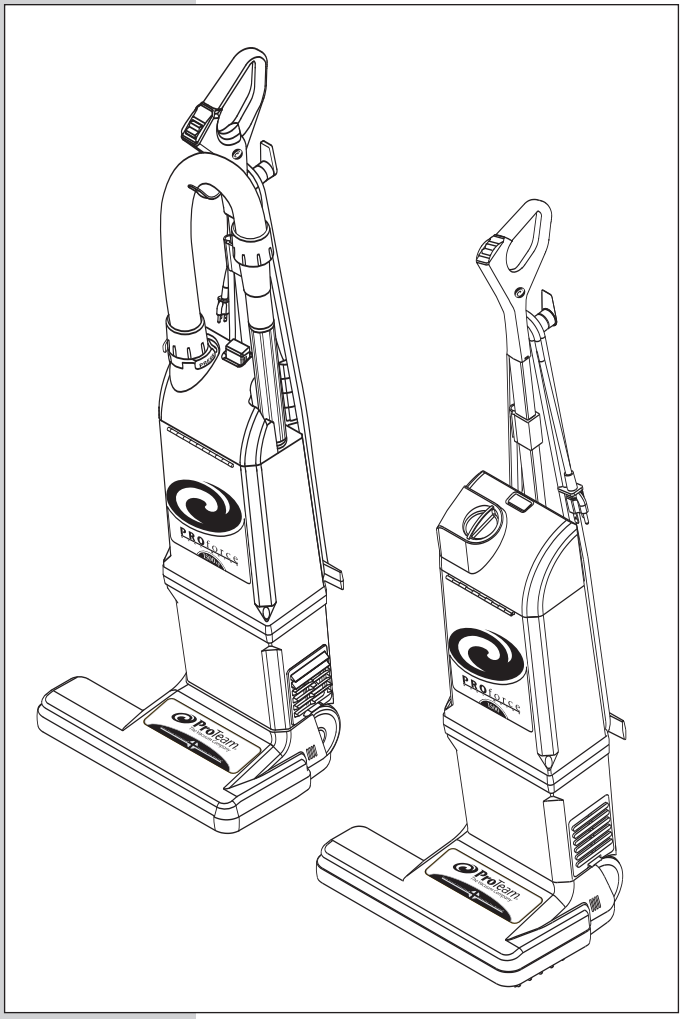

ProForce®
1500/1500XP
Service Manual

ProTeam®
The Vacuum Company

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ATTENTION

Before servicing any part or proceeding with any repair procedure on any ProTeam vacuum, ALWAYS disconnect the vacuum from power source.

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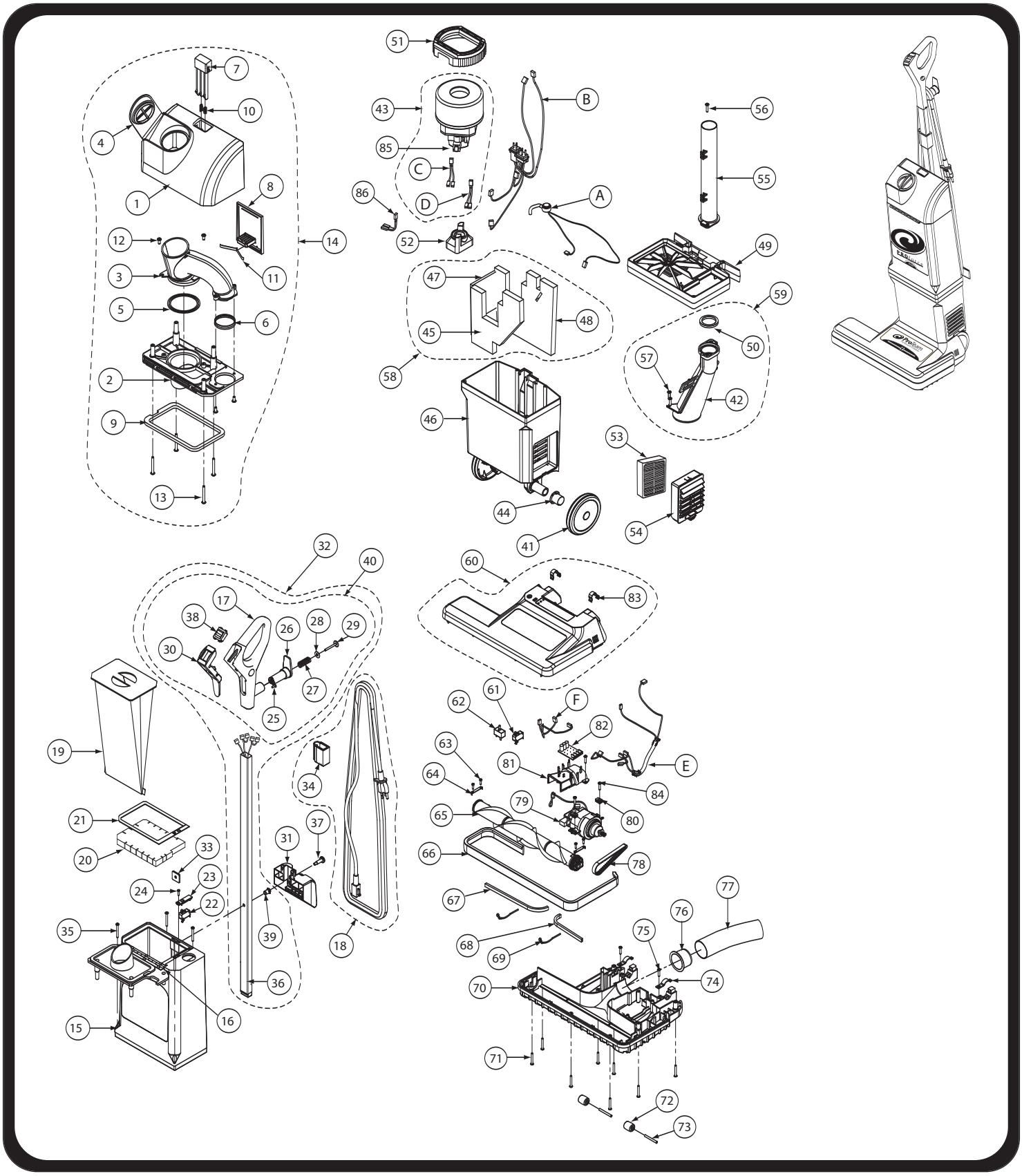
Full Vacuum Parts – 1500

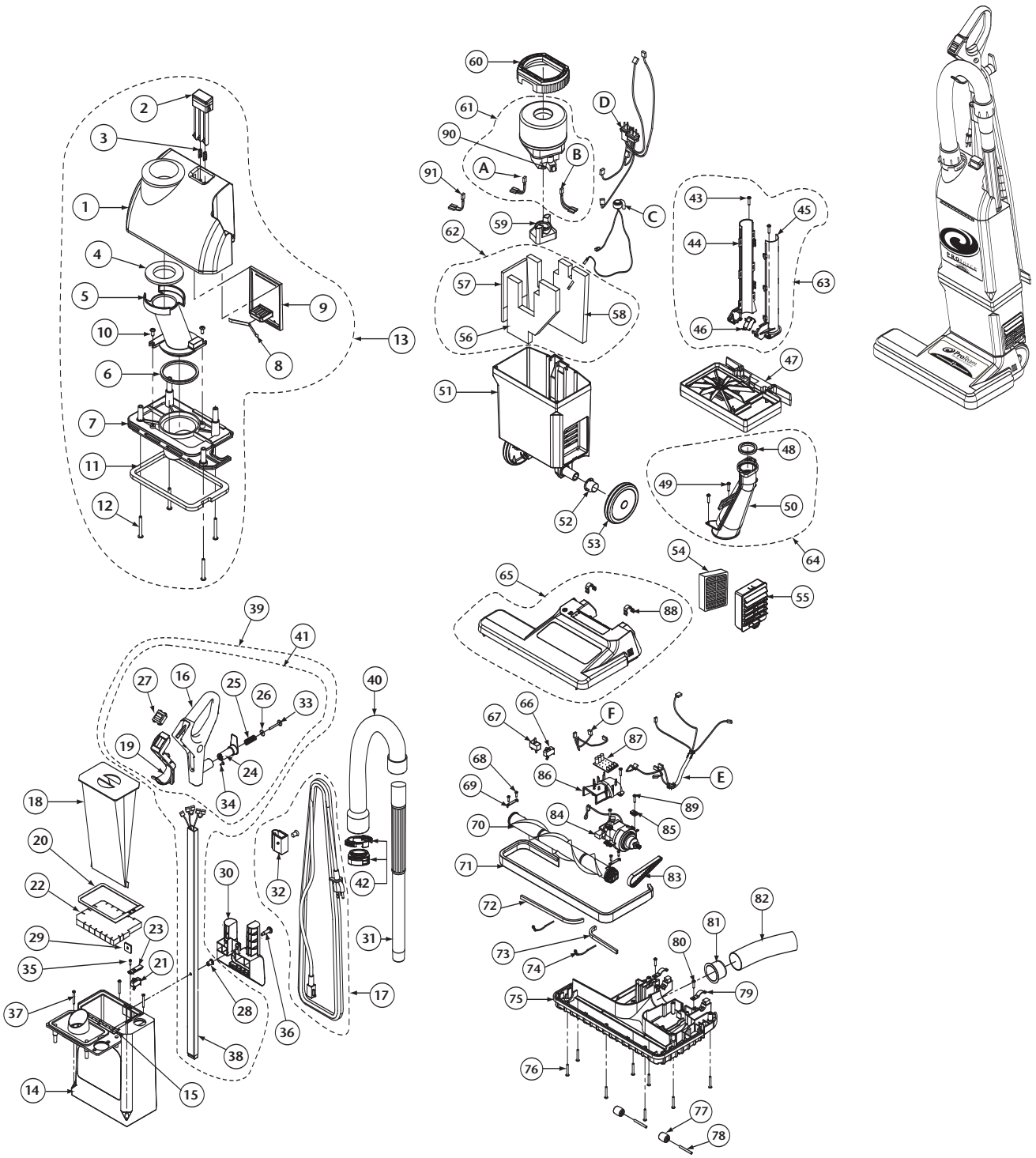


Full Vacuum Index – 1500

	No.	Part Name
1	**104569**	Cover, Bag Housing, Grey
2	**104570**	Plate, Bag Cover Nozzle
3	**104571**	Duct, Crossover, Bag Cover
4	**104574**	Plug, Access Port
5	**104575**	Seal, Crossover Duct/Bag Cover Nozzle Plate, Lower
6	**104576**	Seal, Crossover Duct, Inlet
7	**104232**	Latch, Release, Bag Cover
8	**104243**	Flex Plate, Bag Cover Latch
9	**104241**	Seal, Gasket, Bag Cover
10	**104233**	Spring, Release Button, F/Bag Cover Latch
11	**104242**	Spring, Bag Cover Latch
12	**104577**	Screw, Phillips, 4.2mm x 9.5mm
13	**104493**	Screw, Phillips, 4.2mm x 35mm
14	**105491**	Filter Cover Kit, w/Riveted Hinge and 6 Rivets (includes: #1-13)
15	**104739**	Bag Housing Assembly, Grey, w/Riveted Hinge and Decal Includes Bag Cover Nozzle Plate
16	**104491**	Rivet F/Bag Housing Assembly
17	**104255**	Handle w/Over Mold and Decal
18	**104284**	Cord, Power Clasp, 50' Yellow (Includes: #34)
19	**103483**	Intercept Micro Filter
20	**104281**	Filter, Double Layer Motor Intake
21	**104738**	Seal, Gasket, Bag Housing
22	**104283**	Switch, Filter, Lock-Out
23	**104282**	Cover, Switch, Filter Lock-out
24	**105075**	Screw, Phillips, 2.9mm x 13mm, F/Switch Cover
25	**104509**	Screw, Phillips, F/Handle Assembly M4 x 10mm x .07 Pitch
26	**104268**	Bracket, Cord Wrap
27	**104269**	Spring, Compression, Cord Wrap Bracket
28	**104270**	Washer, Compression Spring, Cord Wrap Bracket
29	**104271**	Screw, Cord Wrap, 4mm x 38mm Phillips Round Head
30	**105090**	Handle Bezel w/Screws
31	**104741**	Handle, Carry
32	**105114**	Handle, Tube Assembly Complete (includes: #17, 25, 26, 27, 28, 29, 30, 36, 38, 39)
33	**104259**	Plate, Handle Nut
34	**105091**	Clasp, Strain Relief, Yellow
35	**104493**	Screw, Phillips, 4.2mm x 35mm
36	**104958**	Handle, Tube, w/Wire Harness, Rivet Nut and Plug Rivet
37	**104266**	Screw, Handle Assembly
38	**105147**	Switch, Rocker, On/Off
39	**104264**	Bushing, Handle Tube
40	**105501**	Handle Kit (includes: #17, 25, 26, 27, 28, 29, 30, 38)

	No.	Part Name
41	**104306**	Wheel, Rear
42	**104250**	Air Duct Assembly
43	**104957**	Motor Assembly Kit w/Jumpers (includes: C, D)
44	**104504**	Bearing, Pivot
45	**103532**	Foam, Sound, Motor Housing Front Panel
46	**104536**	Motor Housing, Charcoal
47	**103533**	Foam, Sound, Motor Housing Left Panel
48	**103531**	Foam, Sound, Motor Housing Rear Panel
49	**104245**	Bulkhead, Dark Grey
50	**104253**	Seal, Lower Air Duct, Nitrile
51	**104249**	Motor Mount, Upper Nitrile
52	**104247**	Motor Mount, Lower Nitrile
53	**105136**	Filter, Exhaust, HEPA Media
54	**104246**	Cover, Filter Cartridge, Charcoal
55	**104578**	Air Duct, Upper ProForce 1500
56	**104209**	Screw, Phillips, 4.2mm x 12mm, F/Upper Air Duct
57	**104267**	Screw, Phillips, 4.2mm x 19mm, F/Lower Air Duct
58	**105488**	Motor Housing Sound Filter Kit (includes: #5,7,8)
59	**105489**	Air Duct Kit (includes: #2, 10, 17)
60	**104494**	Power Nozzle Cover w/Detent Springs & Decal
61	**104279**	Switch, Safety, Power Nozzle Lockout
62	**104212**	Circuit Breaker
63	**104496**	Screw, Phillips, 2.9mm x 13mm, F/Brush Retainer
64	**104499**	Retainer, Brush Roll
65	**104216**	Brush Roll, Power Nozzle, 14"
66	**104218**	Bumper, Power Nozzle, Vinyl
67	**104736**	Seal, Base Cover, Air Duct, Left, 7.5" Long
68	**104737**	Seal, Base Cover, Air Duct, Right, 5.5" Long
69	**104500**	Brace, Formed Wire, F/Power Nozzle Base
70	**104221**	Baseplate, Power Nozzle
71	**104497**	Screw, Phillips, 4.2mm x 35mm, F/Base Cover
72	**104501**	Roller, Front
73	**104502**	Shaft, Front Roller Axle
74	**104503**	Clamp, Rear Wheel
75	**104495**	Screw, Phillips, 4.2mm x 19mm, F/Powerhead
76	**104227**	Sleeve, Hose, Air Duct
77	**104230**	Hose, Power Nozzle to Air Duct, Lower
78	**104217**	Belt, Drive, F/Brush Roll
79	**104506**	Motor, Power Nozzle with Crimps
80	**104498**	Grommet, Vibration, Power Nozzle Motor, Nitrile
81	**104224**	Cover, Air Duct, Power Nozzle
82	**104226**	Board, Vacuum Operation Indicator
83	**104507**	Spring, Detent, Upright Lock
84	**105371**	Screw, Phillips, 4.2mm x 19mm, F/Power Nozzle Motor
85	**105281**	Carbon Brush Set for ProForce Motor
86	**105760**	Thermal Protector
	105755	Wire Harness Kit includes: A. Sensor, Bag, Full Indicator B. Harness, Wire, Main Power Supply C. Harness, Jumper, White D. Harness, Jumper, Red E. Harness, Wire, Power Nozzle F. Harness, Power Nozzle Switch

Full Vacuum Parts – 1500XP



Full Vacuum Index – 1500XP

	No.	Part Name
1	**104234**	Cover, Bag Housing, Grey F/XP
2	**104232**	Latch, Release, Bag Cover
3	**104233**	Spring, Release Button, F/Bag Cover Latch
4	**104235**	Seal, Transition Duct/Bag Cover, Upper
5	**104236**	Duct, Transition, Bag Cover, F/XP
6	**104238**	Seal, Transition Duct/Bag Cover Nozzle Plate, Lower
7	**104239**	Plate, Bag Cover Nozzle, F/XP
8	**104242**	Spring, Bag Cover Latch
9	**104243**	Plate, Bag Cover Latch
10	**104505**	Screw, Phillips, 4.2mm x 9.5mm
11	**104241**	Gasket, Bag Cover
12	**104493**	Screw, Phillips, 4.2mm x 35mm
13	**105486**	Filter Cover Kit w/Riveted Hinge and 6 Rivets (includes: #1–12)
14	**104490**	Bag Housing Assembly, Grey w/Riveted Hinge & Decal Includes Bag Cover Nozzle Plate
15	**104491**	Rivet F/Bag Housing Assembly
16	**104255**	Handle w/Over Mold and Decal
17	**104284**	Cord, Power, w/Strain Relief, 50' Yellow
18	**103483**	Intercept Micro Filter
19	**105088**	Handle Bezel w/Screws
20	**104738**	Seal, Gasket, Bag Housing
21	**104283**	Switch, Filter, Lock-Out
22	**104281**	Filter, Double Layer Motor Intake
23	**104282**	Cover, Switch, Filter Lock-out
24	**104268**	Bracket, Cord Wrap
25	**104269**	Spring, Compression, Cord Wrap Bracket
26	**104270**	Washer, Compression Spring, Cord Wrap Bracket
27	**105147**	Switch, Rocker, On/Off
28	**104264**	Bushing, Handle Tube
29	**104259**	Plate, Handle Nut
30	**104265**	Handle, Carry w/Tool Caddy, F/XP
31	**104294**	Wand, F/XP
32	**105091**	Clasp, Strain Relief, Yellow W/Ratchet Fastener
33	**104271**	Screw, Cord Wrap, 4mm x 38mm, Phillips Round Head
34	**104509**	Screw, Phillips, M4 x 10mm x .07 Pitch, F/Handle Assembly
35	**105075**	Screw, Phillips, 2.9mm x 13mm, F/Switch Cover
36	**104266**	Screw, Handle Assembly
37	**104493**	Screw, Phillips, 4.2mm x 35mm
38	**104958**	Handle, Tube w/Wire Harness, Rivet Nut and Plug Rivet
39	**104959**	Handle, Tube Assembly Complete, F/XP (includes: #16, 19, 24, 25, 26, 27, 28, 33, 34, 38)
40	**104961**	Hose, Assembly w/Cuffs, F/XP (includes: #42)
41	**105502**	Handle Kit (includes: #16, 19, 24, 25, 26, 27, 33, 34)
42	**105573**	Quick Release Hose Cuff
	105572	Quick Detach Clip

	No.	Part Name
43	**104209**	Screw, Phillips, 4.2mm x 12mm, F/Wand Guide
44	**104261**	Guide, Wand, Upper Left
45	**104260**	Guide, Wand, Upper Right
46	**104263**	Switch, Wand Lockout
47	**104245**	Bulkhead, Dark Grey
48	**104253**	Seal, Lower Air Duct, Nitrile
49	**104267**	Screw, Phillips, 4.2mm x 19mm, F/Lower Air Duct
50	**104250**	Air Duct Assembly
51	**104536**	Motor Housing, Charcoal
52	**104504**	Bearing, Pivot
53	**104306**	Wheel, Rear
54	**105136**	Filter, Exhaust, HEPA Media
55	**104246**	Cover, Filter Cartridge, Charcoal
56	**103532**	Foam, Sound, Motor Housing, Front Panel
57	**103533**	Foam, Sound, Motor Housing, Left Panel
58	**103531**	Foam, Sound, Motor Housing, Rear Panel
59	**104247**	Motor Mount, Lower Nitrile
60	**104249**	Motor Mount, Upper Nitrile
61	**104957**	Motor Assembly w/Jumpers (includes: A, B)
62	**105488**	Motor Housing Sound Filter (includes: #56, 57, 58)
63	**105490**	Wand Kit (includes: #43, 44, 45, 46)
64	**105489**	Air Duct Kit (includes: #48, 49, 50)
65	**104494**	Power Nozzle Cover w/Detent Springs & Decal
66	**104279**	Switch, Safety, Power Nozzle Lockout
67	**104212**	Circuit Breaker
68	**104496**	Screw, Phillips, 2.9mm x 13mm, F/Brush Retainer
69	**104499**	Retainer, Brush Roll
70	**104216**	Brush Roll, Power Nozzle, 14"
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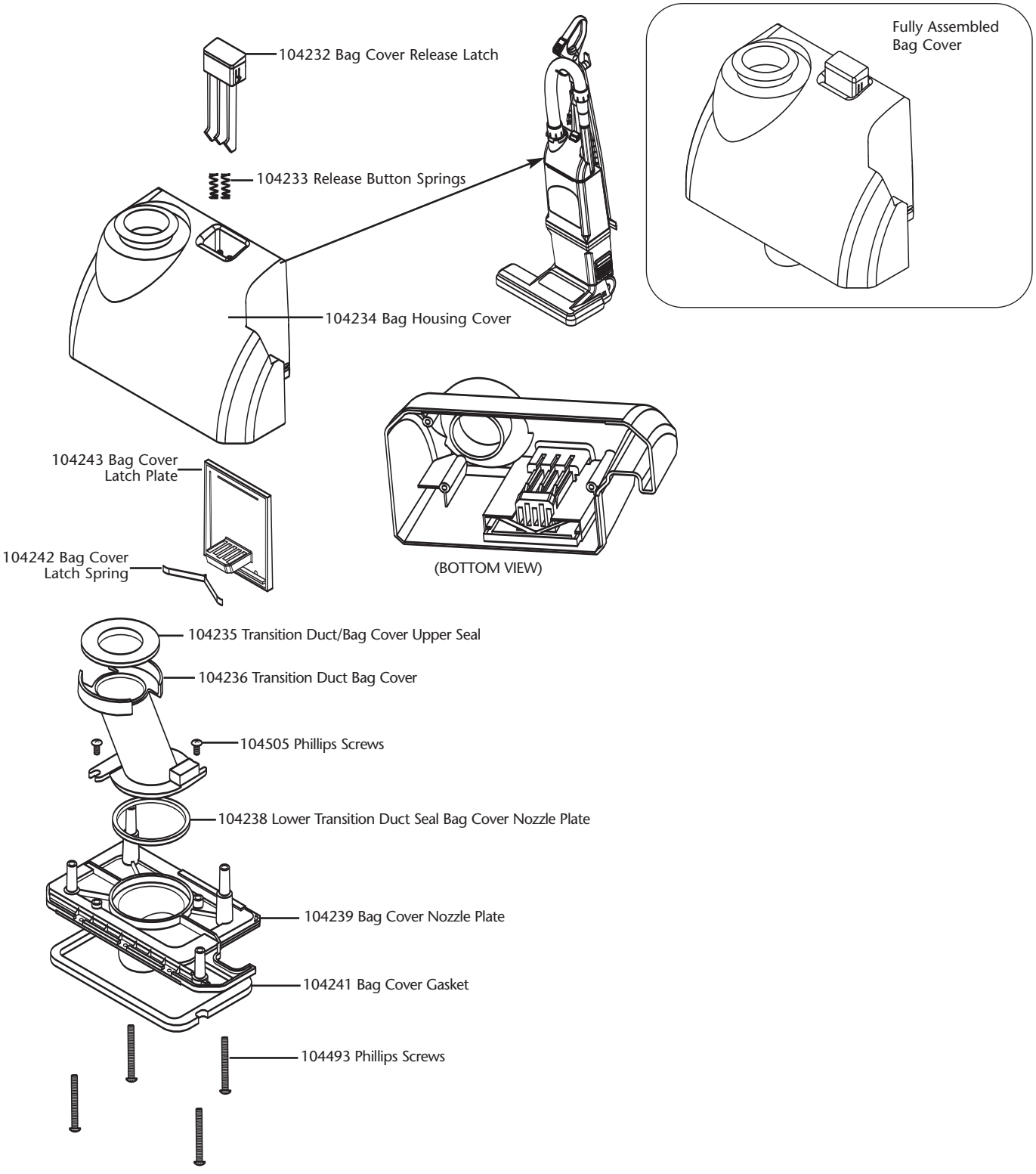
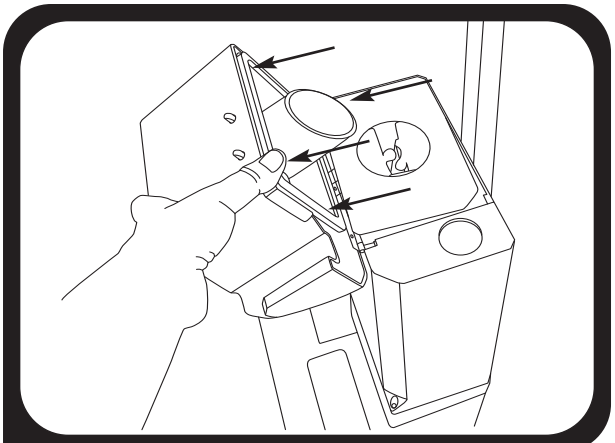
73	**104737**	Seal, Base Cover, Air Duct, Right, 5.5" Long
74	**104500**	Brace, Formed Wire, F/Power Nozzle Base
75	**104221**	Baseplate, Power Nozzle
76	**104497**	Screw, Phillips, 4.2mm x 32mm, F/Base Cover
77	**104501**	Roller, Front
78	**104502**	Shaft, Front Roller Axle
79	**104503**	Clamp, Rear Wheel
80	**104495**	Screw, Phillips, 4.2mm x 19mm, F/Powerhead
81	**104227**	Sleeve, Hose, Air Duct
82	**104230**	Hose, Power Nozzle to Air Duct, Lower
83	**104217**	Belt, Drive, F/Brush Roll
84	**104506**	Motor, Power Nozzle with Crimps
85	**104498**	Grommet, Vibration, Power Nozzle Motor, Nitrile
86	**104224**	Cover, Air Duct, Power Nozzle
87	**104226**	Board, Vacuum Operation Indicator
88	**104507**	Spring, Detent, Upright Lock
89	**105371**	Screw, Phillips, 4.2mm x 19mm, F/Power Nozzle Motor
90	**105281**	Carbon Brush Set for ProForce Motor
91	**105760**	Thermal Protector
	105754	Wire Harness Kit includes: A. Harness, Jumper, Red B. Harness, Jumper, White C. Sensor, Bag Full Indicator D. Harness, Main Power Supply E. Harness, Wire, Power Nozzle F. Harness, Power Nozzle Switch

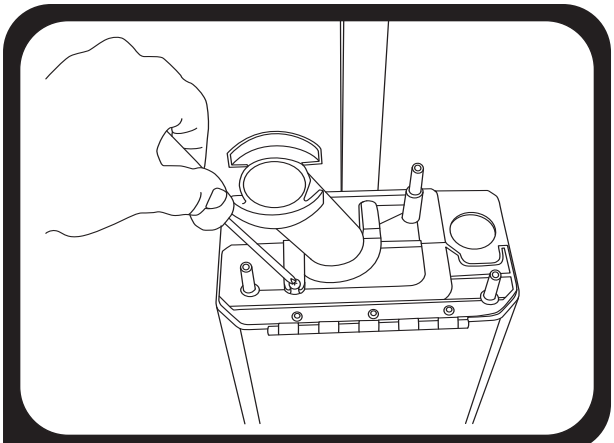
Bag Cover


104232 Bag Cover Release Latch
104233 Release Button Springs
104234 Bag Housing Cover
Fully Assembled
Bag Cover
104243 Bag Cover
Latch Plate
104242 Bag Cover
Latch Spring
(BOTTOM VIEW)
104235 Transition Duct/Bag Cover Upper Seal
104236 Transition Duct Bag Cover
104505 Phillips Screws
104238 Lower Transition Duct Seal Bag Cover Nozzle Plate
104239 Bag Cover Nozzle Plate
104241 Bag Cover Gasket
104493 Phillips Screws

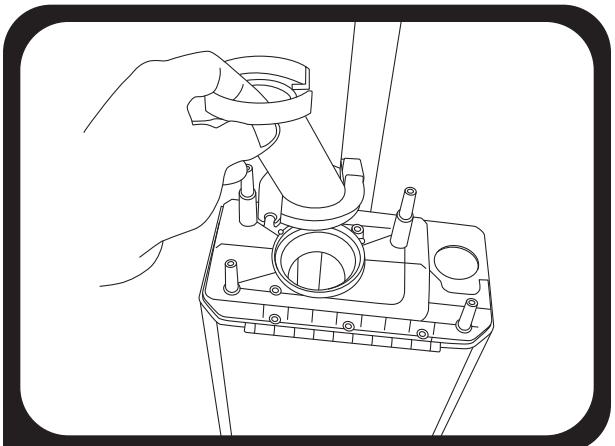
DISASSEMBLY



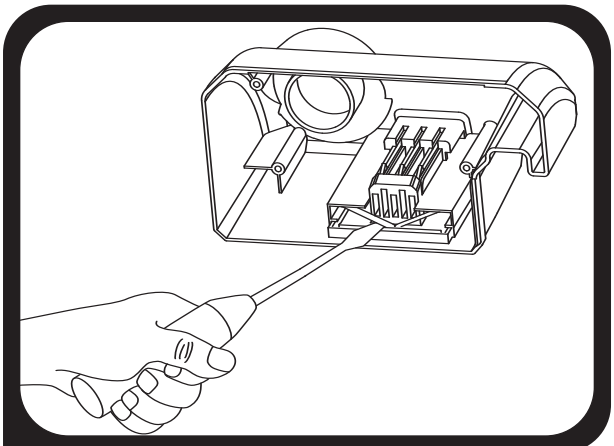
1. Tilt bag cover forward to open. Remove (4) phillips screws to release from bag cover nozzle plate.



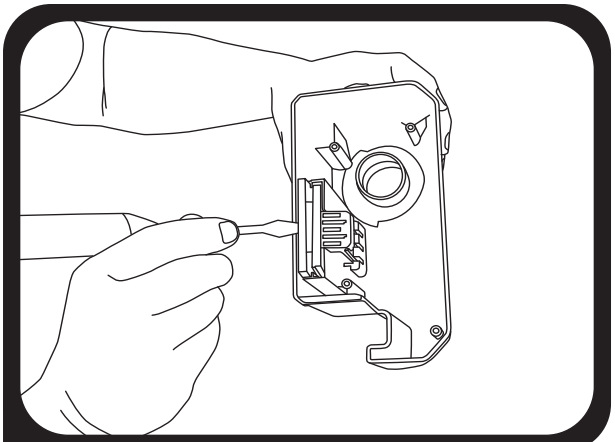
2. To release transition duct remove (2) phillips screws from bag cover nozzle plate.



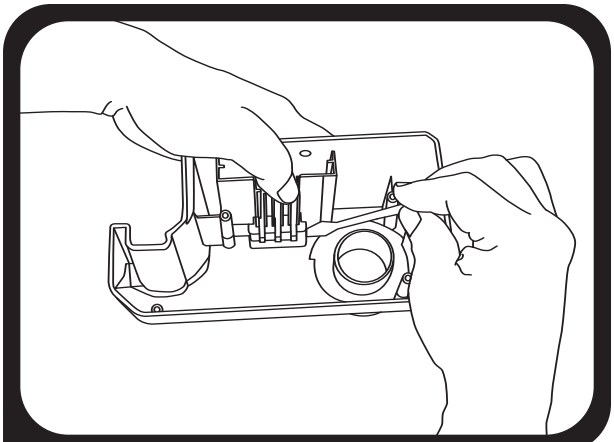
3. Lift transition duct bag cover and remove.



4. Using a flathead screwdriver pry upward on bag cover latch spring to release.



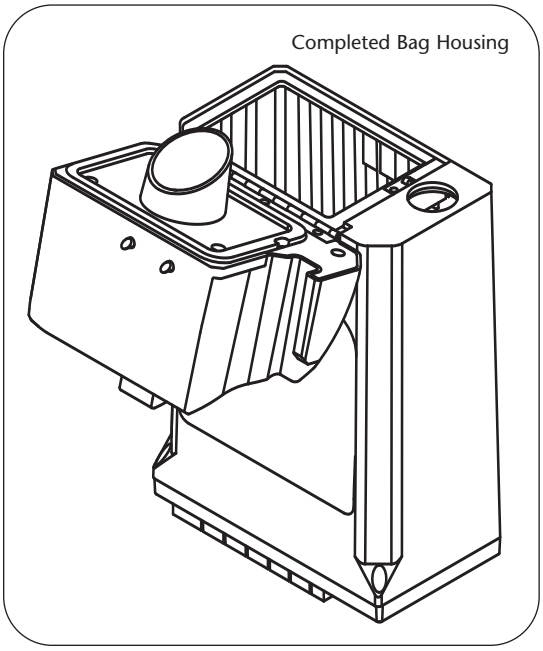
5. Insert flathead screwdriver beneath bag cover latch plate to release. Make sure rounded points clear holes in bag cover.

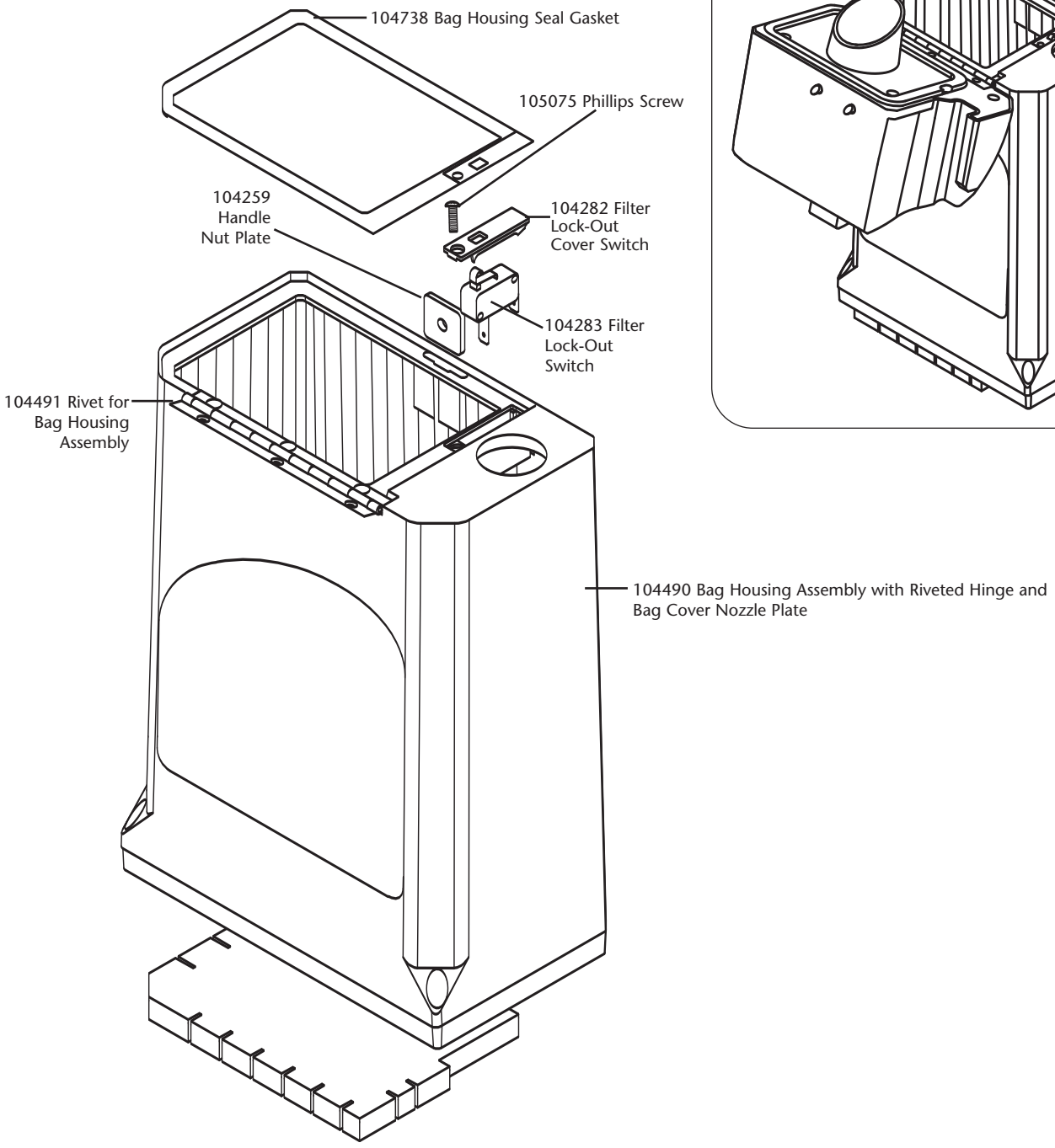


6. Using thumb to hold in place, insert flat-head screwdriver into bag cover (near top) to release bag cover release latch.

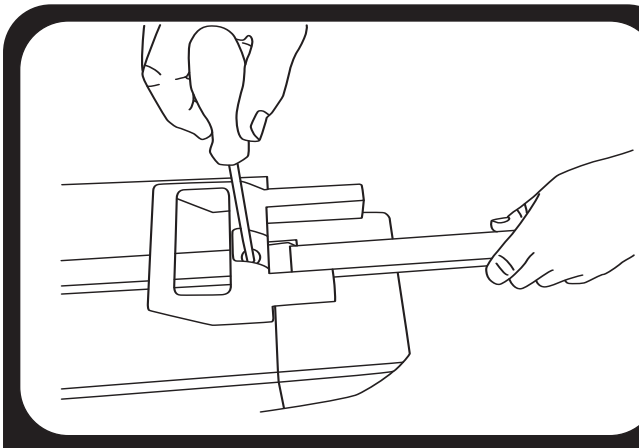
To Reassemble. Repeat steps in reverse.

Bag Housing

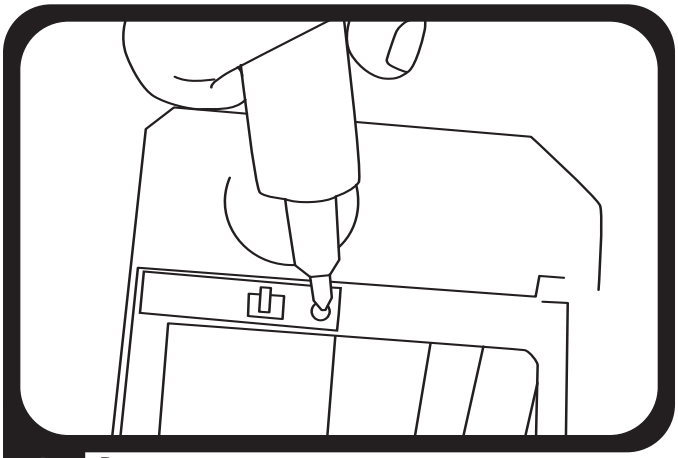

Completed Bag Housing


104738 Bag Housing Seal Gasket
105075 Phillips Screw
104259
Handle
Nut Plate
104282 Filter
Lock-Out
Cover Switch
104283 Filter
Lock-Out
Switch
104491 Rivet for
Bag Housing
Assembly
104490 Bag Housing Assembly with Riveted Hinge and
Bag Cover Nozzle Plate

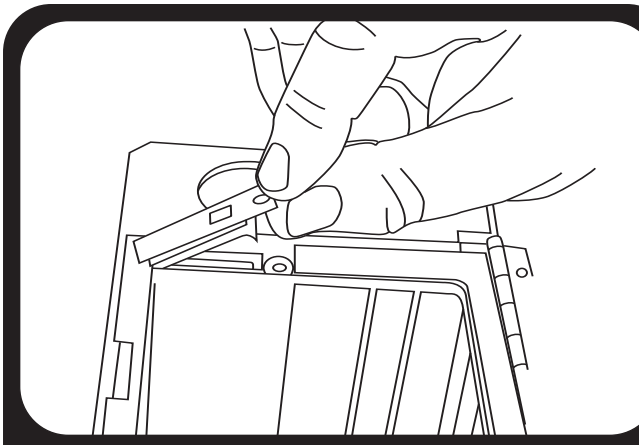
DISASSEMBLY



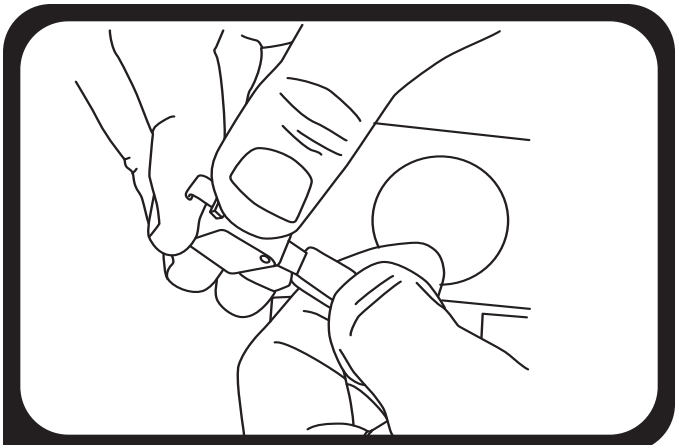
1. Remove screw on carry handle. Slide tube away from base. Unplug power cord.



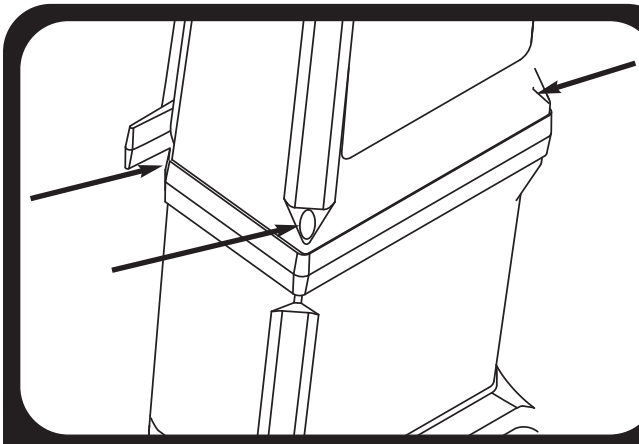
2. Remove cover screw.



3. Remove switch cover and filter lockout switch. To remove the switch cover, insert a flathead screwdriver under switch lever and gently pry upward.



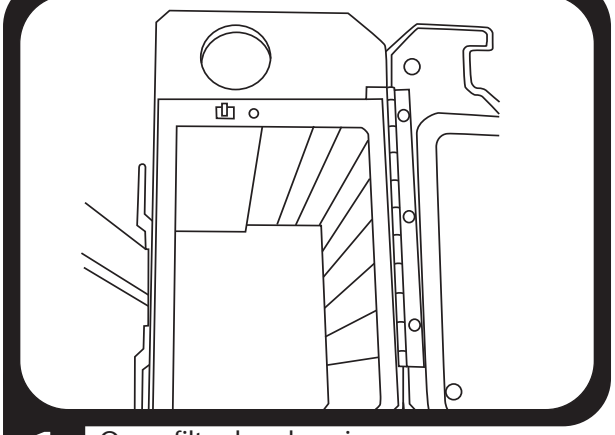
4. Remove crimps by pressing locking tab on locked connector.



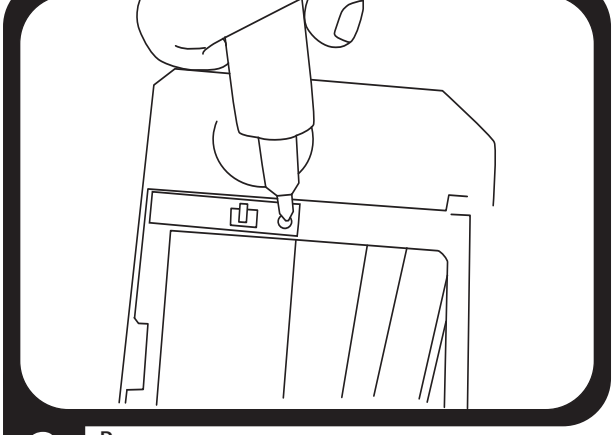
5. Remove 4 screws located near bottom of bag housing (2 front, 2 back). Remove bag housing.

To Reassemble. Repeat steps in reverse.

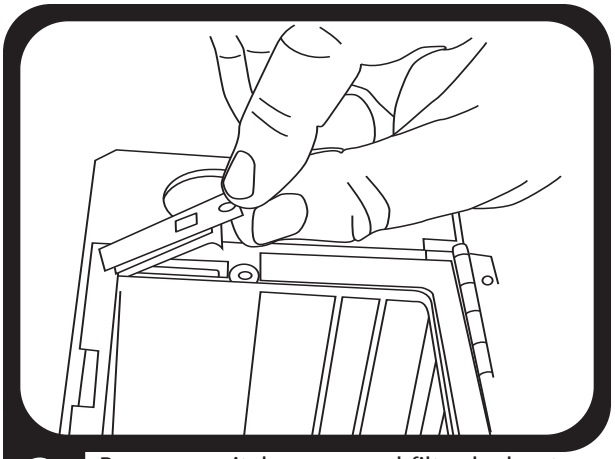
BAG LOCKOUT SWITCH REPLACEMENT



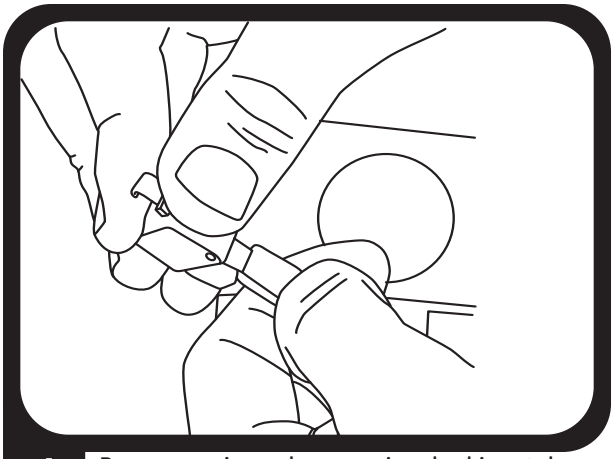
1. Open filter bag housing. Remove filter bag.



2. Remove cover screw.

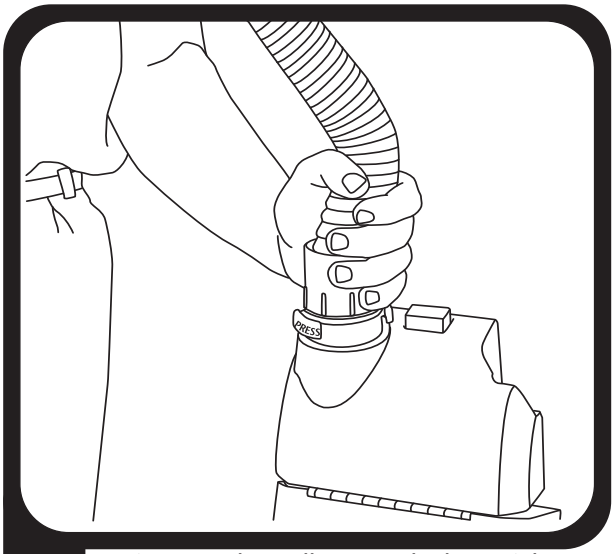


3. Remove switch cover and filter lockout switch. To remove the switch cover, insert a flathead screwdriver under switch lever and gently pry upward.

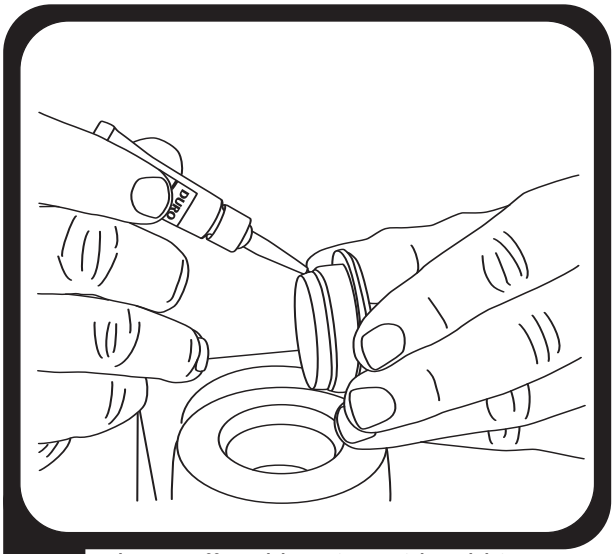


4. Remove crimps by pressing locking tab on locked connectors. Reverse steps to reassemble.

HOSE CAP COLLAR REPAIR – For ProForce 1500XP Only

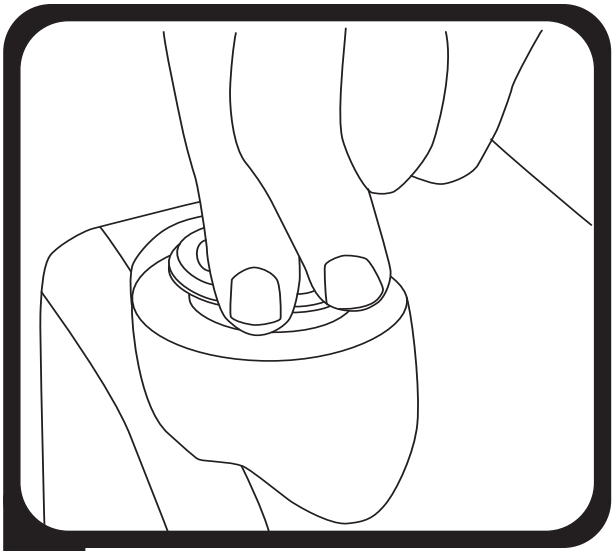


1. To inspect the collar, attach the quick release cuff to the bag cover collar. Lift the vacuum by the hose cuff. The collar should support the weight of the vacuum. If not, the collar will fail and separate from the bag cover. The collar will need to be removed from the quick release cuff and re-glued into the bag cover. If this collar test fails, proceed to Step 2.



2. Clean cuff and housing with rubbing alcohol. Apply a continuous bead of "Super Glue" type adhesive around the entire perimeter of the detached collar. Care should be taken to avoid drips and runs.

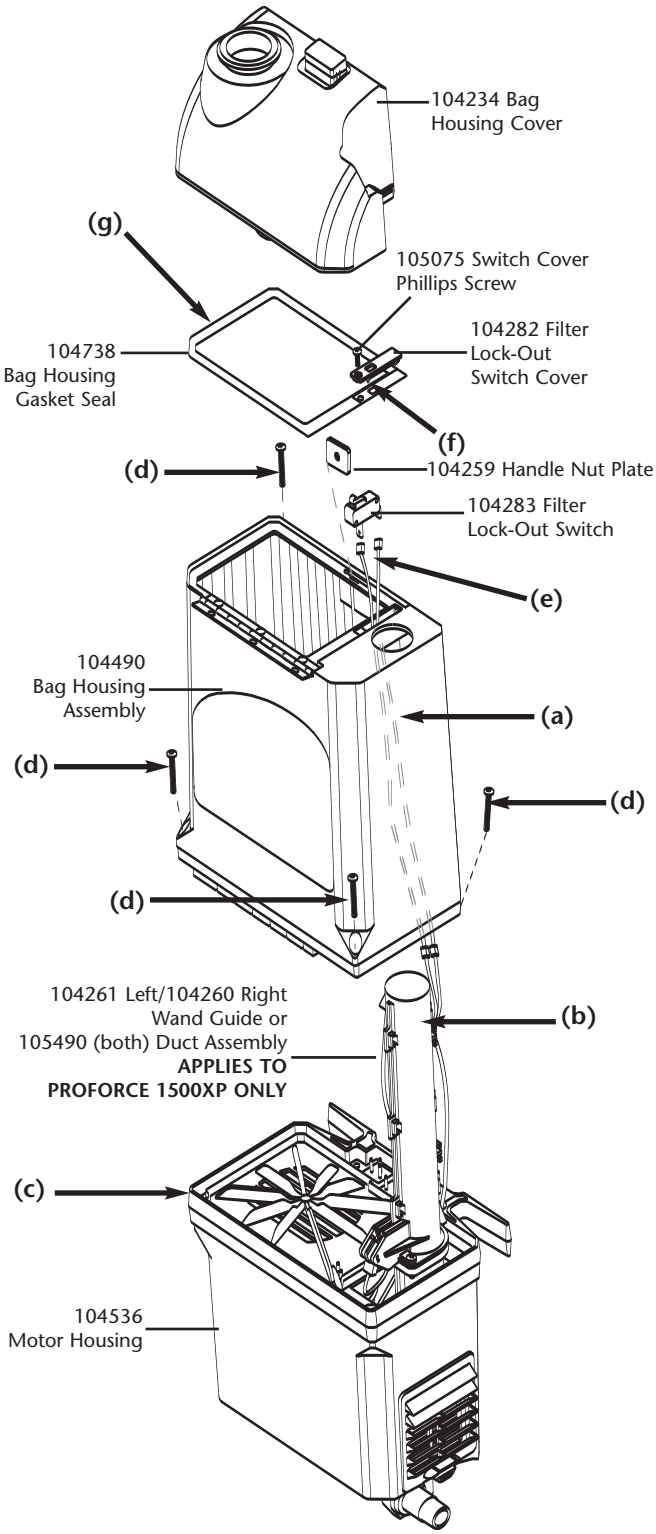
IMPORTANT: you have only a few seconds to apply the bead of glue and seat the collar into the bag cover.



3. Quickly insert collar into bag cover evenly, pressing firmly for 20 seconds to assure an adequate bond.

Bag Housing to Motor Housing

ASSEMBLY



(a) Feed bag switch wires through bag housing using wire guide (see page 18).

(b) Align duct with opening in bag housing **(APPLIES TO PROFORCE 1500XP ONLY)**.

(c) Bag housing assembly should fit neatly onto bulkhead.

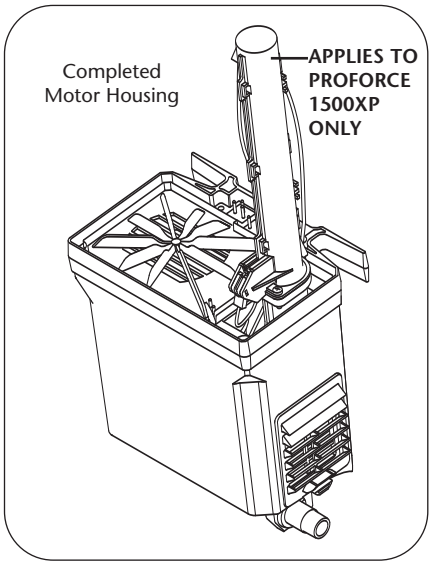
(d) Insert bag housing screws and tighten.

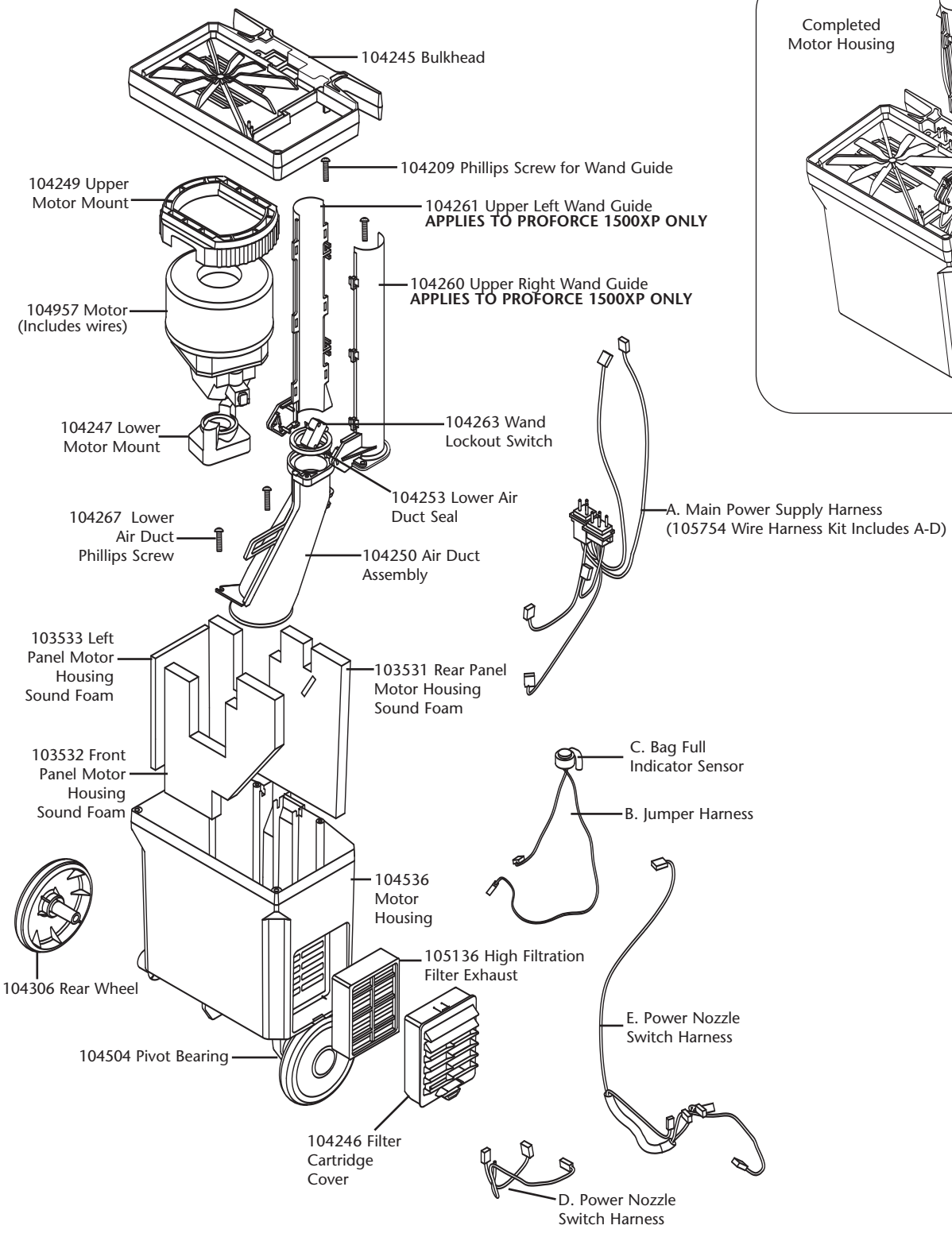
(e) Attach harness connectors to switch and place switch into position.

(f) Fasten switch cover with screw.

(g) If replacing the bag housing seal, do not let the seal cover the lockout switch cover opening.

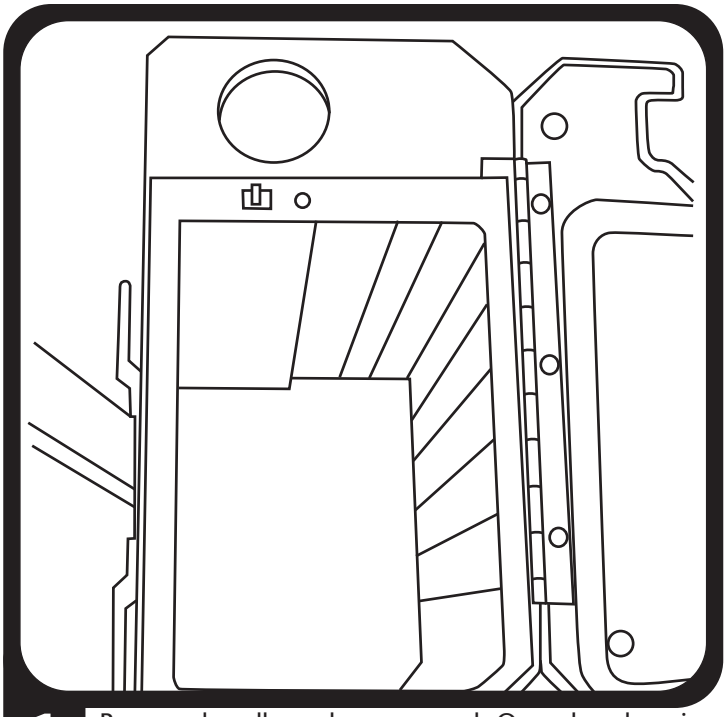
NOTE: Make sure the handle nut plate (#104259) is in place before you replace the bag housing gasket seal.


Completed
Motor Housing
APPLIES TO
PROFORCE
1500XP
ONLY

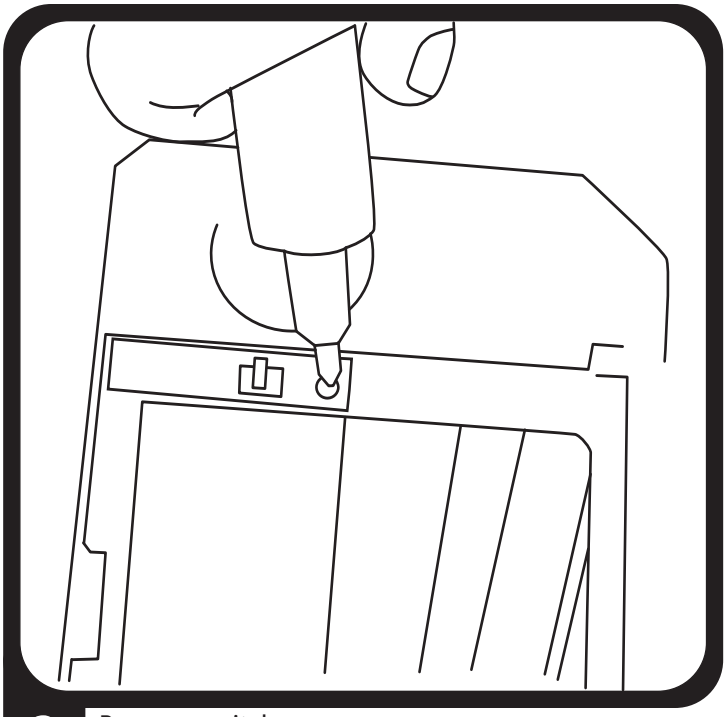

104245 Bulkhead
104209 Phillips Screw for Wand Guide
104249 Upper
Motor Mount
104261 Upper Left Wand Guide
APPLIES TO PROFORCE 1500XP ONLY
104260 Upper Right Wand Guide
APPLIES TO PROFORCE 1500XP ONLY
104957 Motor
(Includes wires)
104247 Lower
Motor Mount
104263 Wand
Lockout Switch
104253 Lower Air
Duct Seal
104267 Lower
Air Duct
Phillips Screw
104250 Air Duct
Assembly
A. Main Power Supply Harness
(105754 Wire Harness Kit Includes A-D)
103533 Left
Panel Motor
Housing
Sound Foam
103531 Rear Panel
Motor Housing
Sound Foam
103532 Front
Panel Motor
Housing
Sound Foam
C. Bag Full
Indicator Sensor
B. Jumper Harness
104536
Motor
Housing
104306 Rear Wheel
105136 High Filtration
Filter Exhaust
E. Power Nozzle
Switch Harness
104504 Pivot Bearing
104246 Filter
Cartridge
Cover
D. Power Nozzle
Switch Harness

Motor Housing

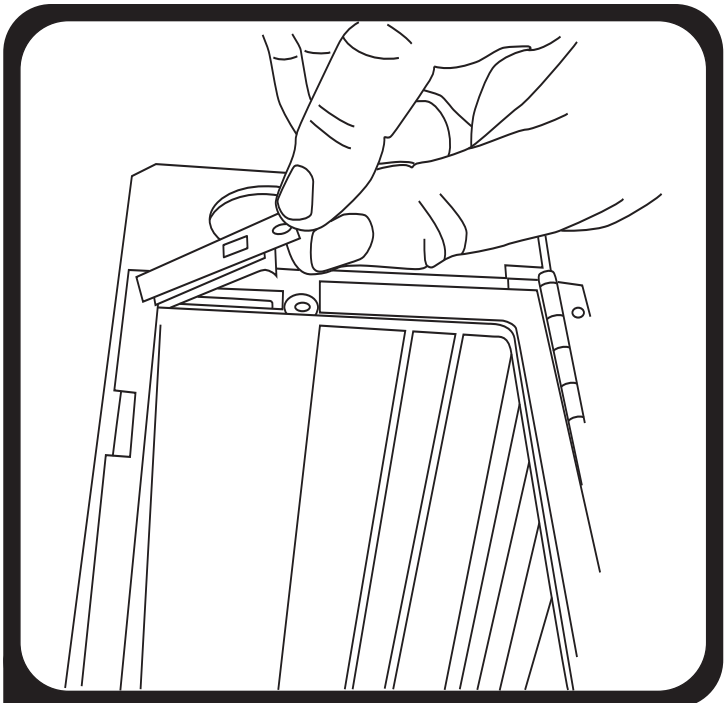
DISASSEMBLY



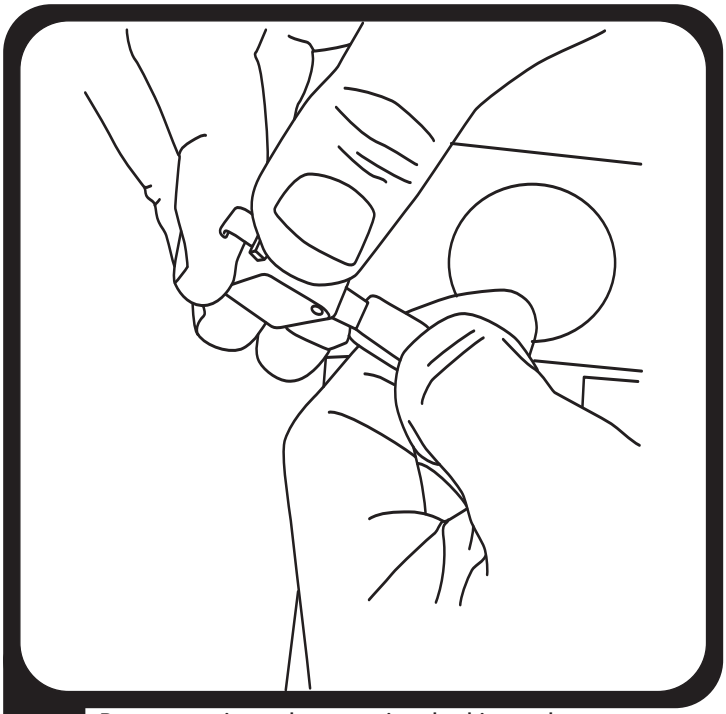
1. Remove handle and power cord. Open bag housing cover. Remove Intercept Micro™ Filter.



2. Remove switch cover screw.



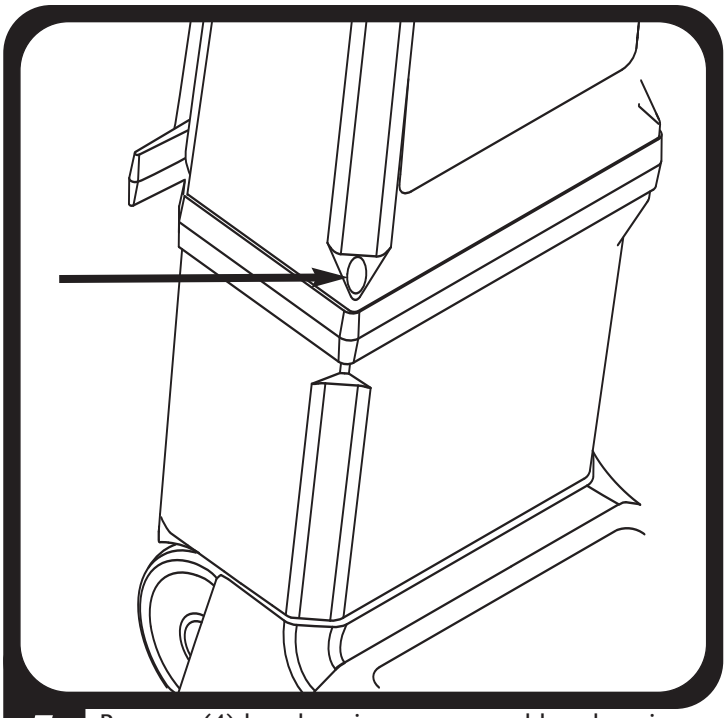
3. Remove switch cover and filter lockout switch. To remove the switch cover, insert a flathead screwdriver under switch lever and gently pry upward.



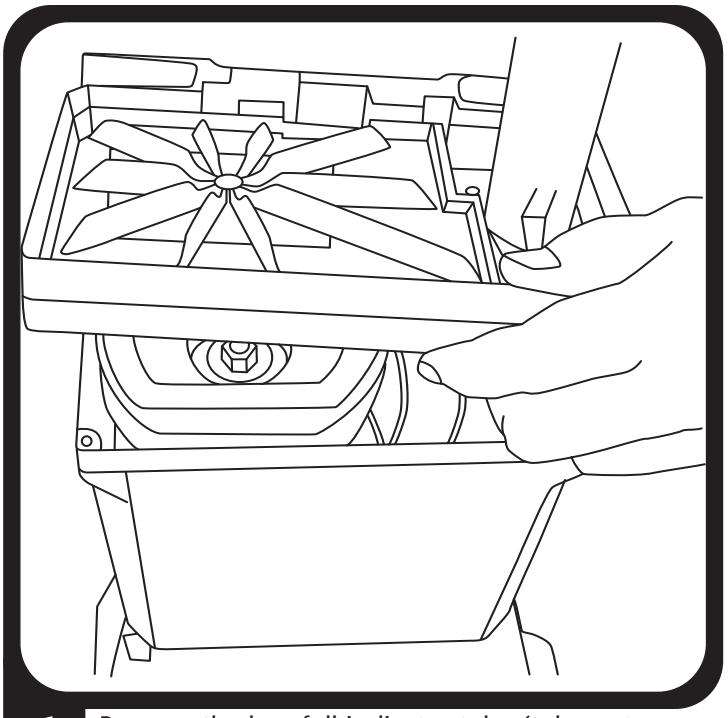
4. Remove crimps by pressing locking tab on connector.

(Continued on page 15)

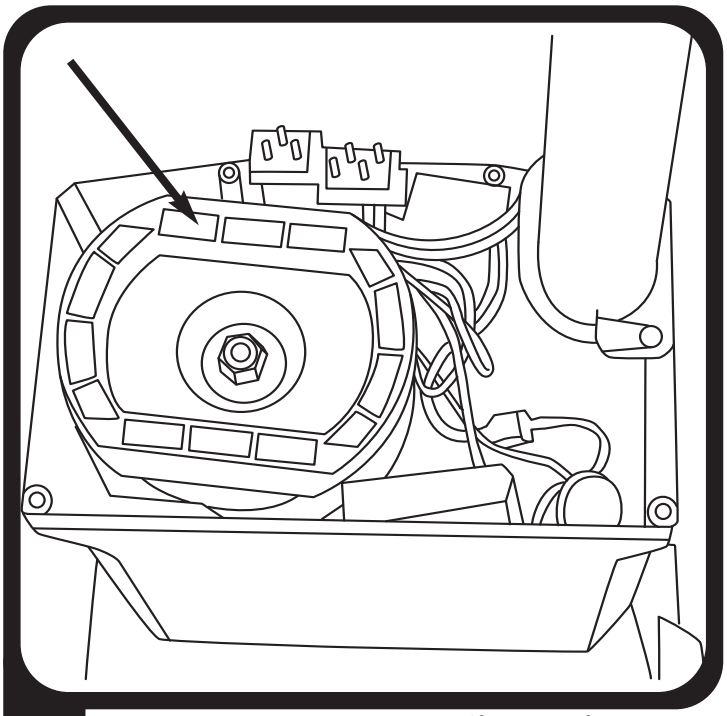
DISASSEMBLY (CONTINUED FROM PG 14)



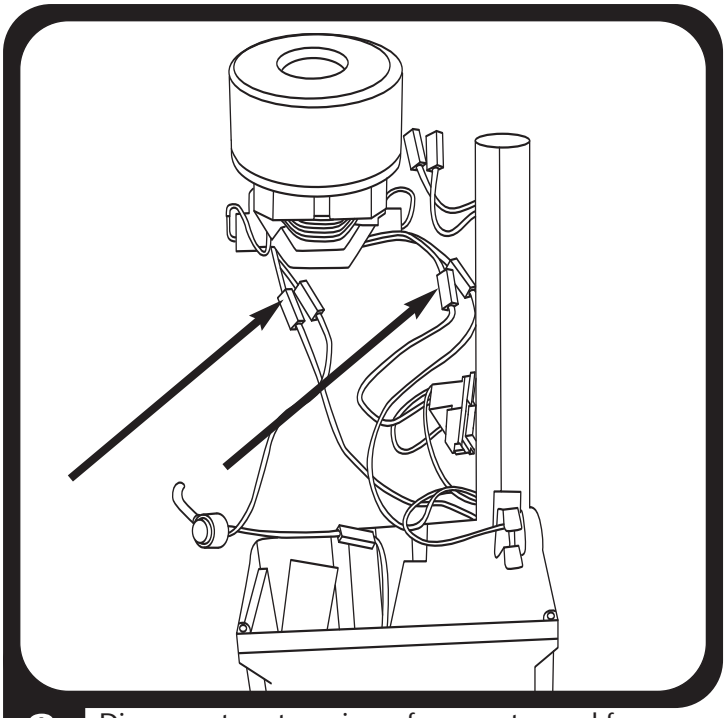
5. Remove (4) bag housing screws and bag housing.



6. Remove the bag full indicator tube (tube not pictured) from the bulkhead and lift off the bulkhead.



7. Remove upper motor mount. Lift motor from housing.

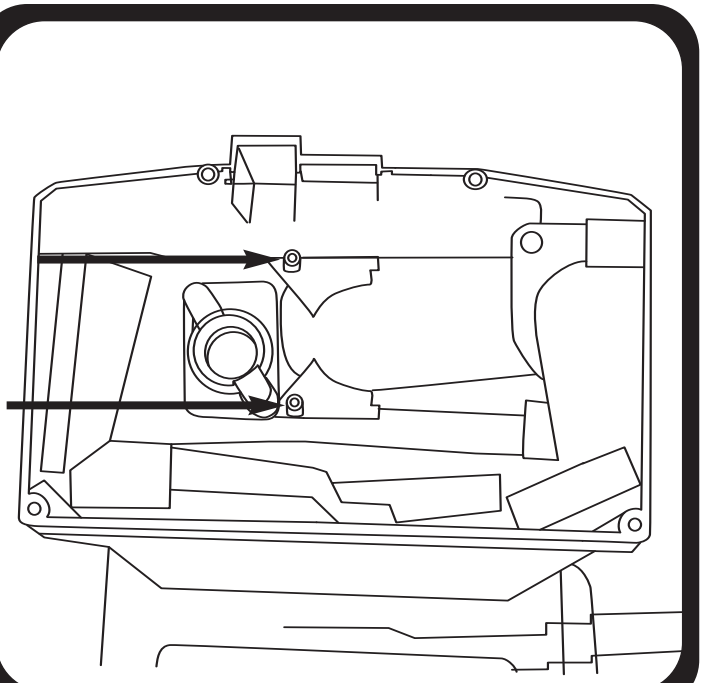


8. Disconnect motor crimps from motor and from lower air duct. Remove motor.

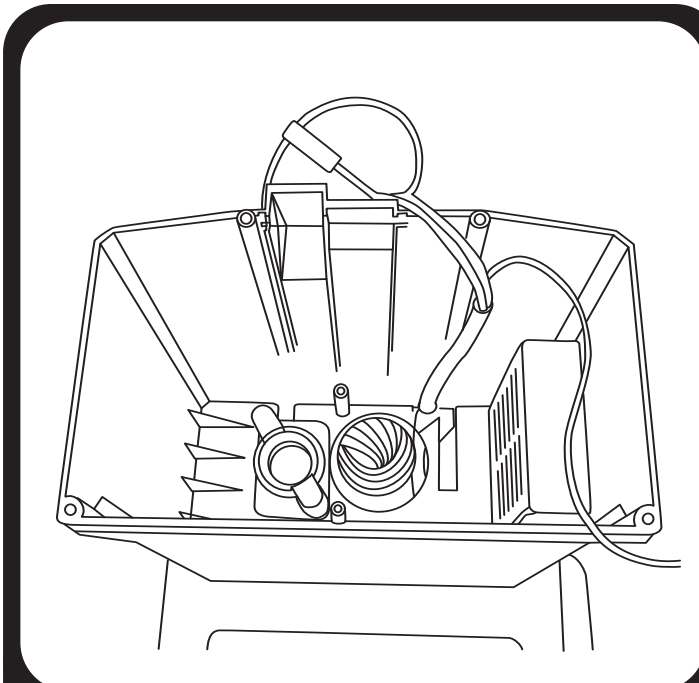
(Continued on page 16)

Motor Housing

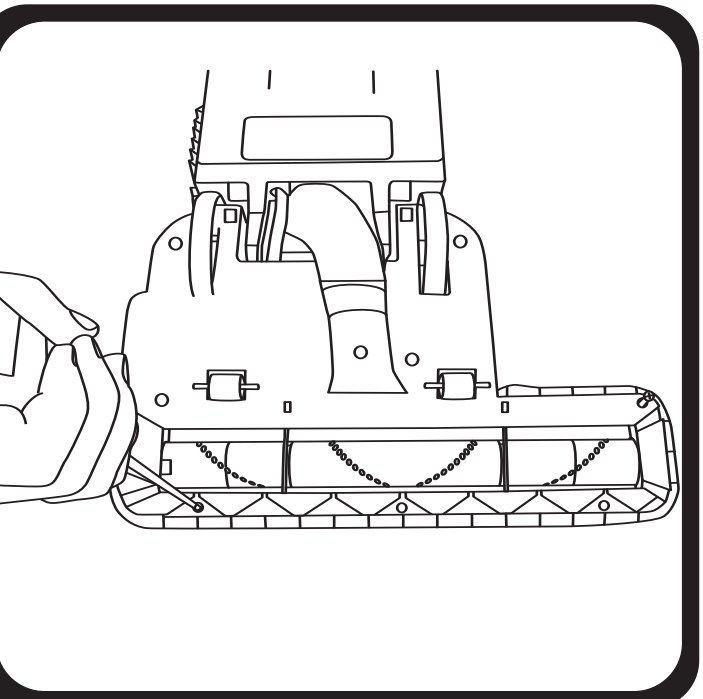
DISASSEMBLY (CONTINUED FROM PG 15)



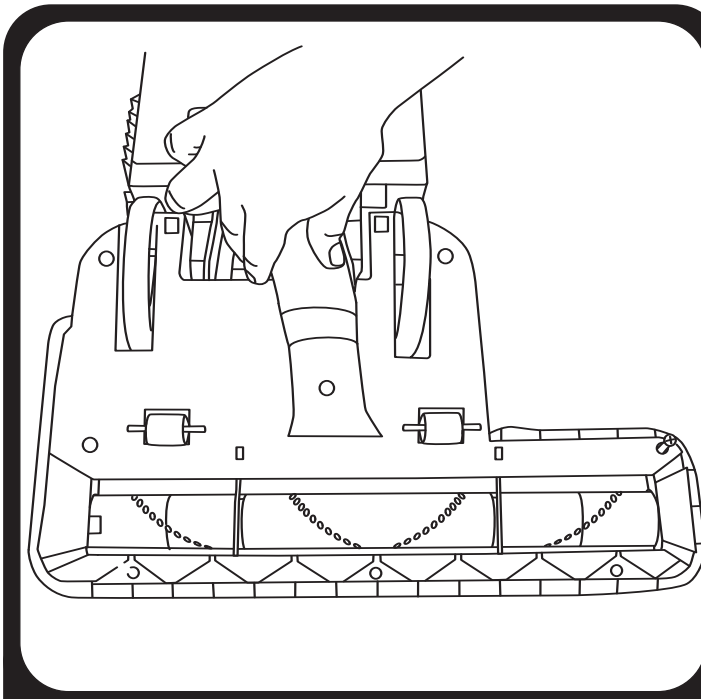
9. Remove (2) lower air duct screws from inside motor housing then remove the foam that covers wire harness.



10. Housing should look like this after the foam and air duct are removed.



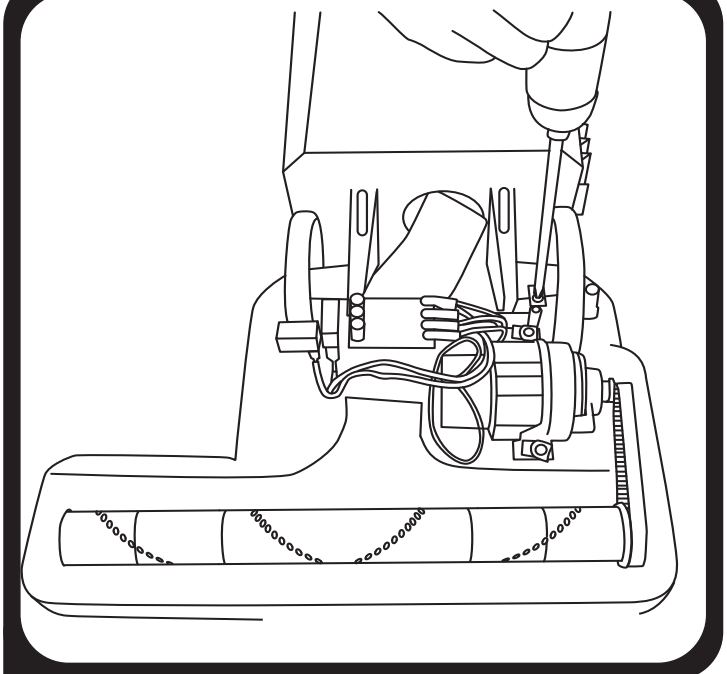
11. Turn vacuum over and remove (8) screws.



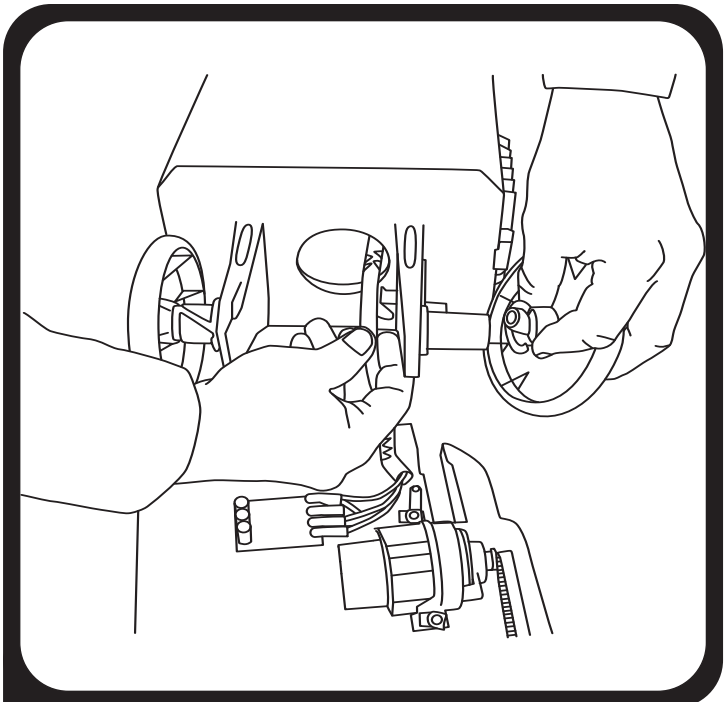
12. Slide duct flex hose from powerhead.

(Continued on page 17)

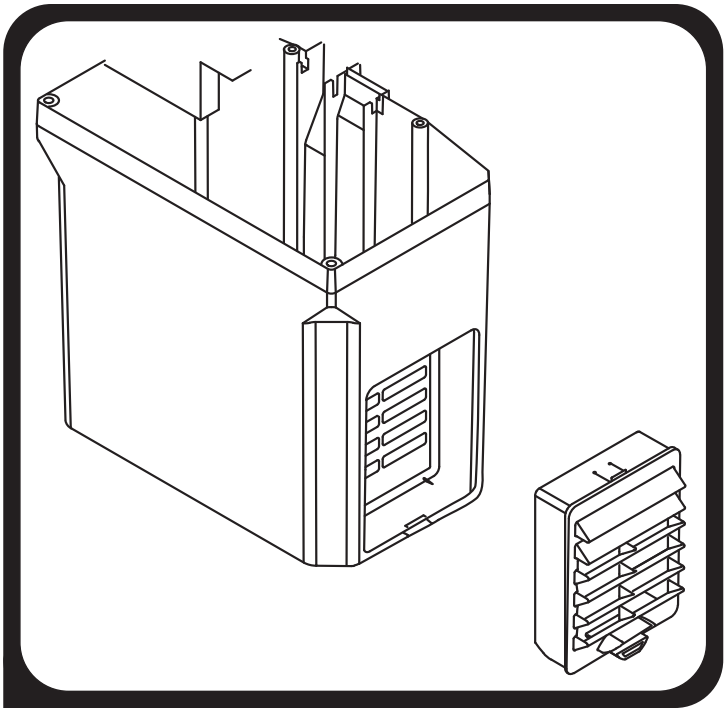
DISASSEMBLY (CONTINUED FROM PG 16)



13. Remove (2) wheel clamp screws on left and right wheels.



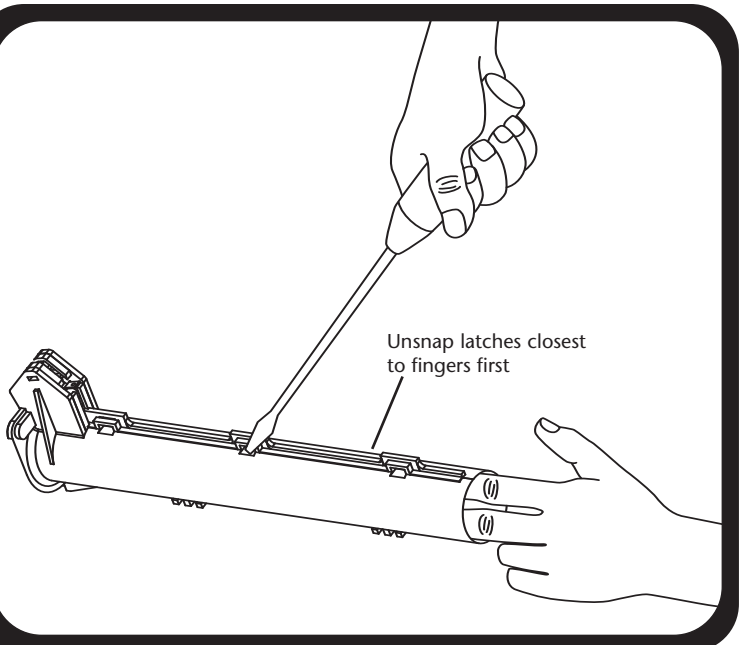
14. Remove wheels and pivot bearings. Pull wire harness through body housing.



15. Remove exhaust filter.

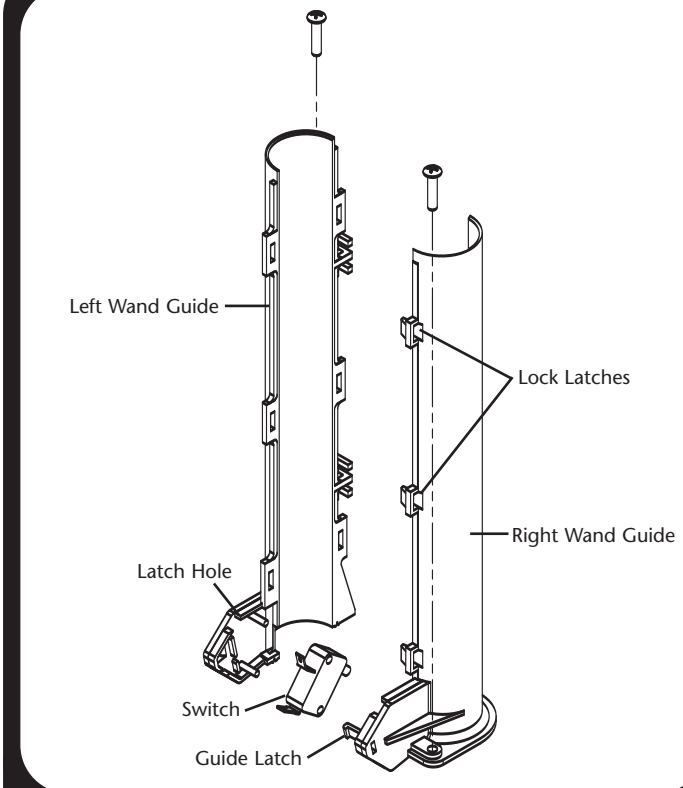
To Reassemble. Repeat steps in reverse.

WAND GUIDE – For ProForce 1500XP Only



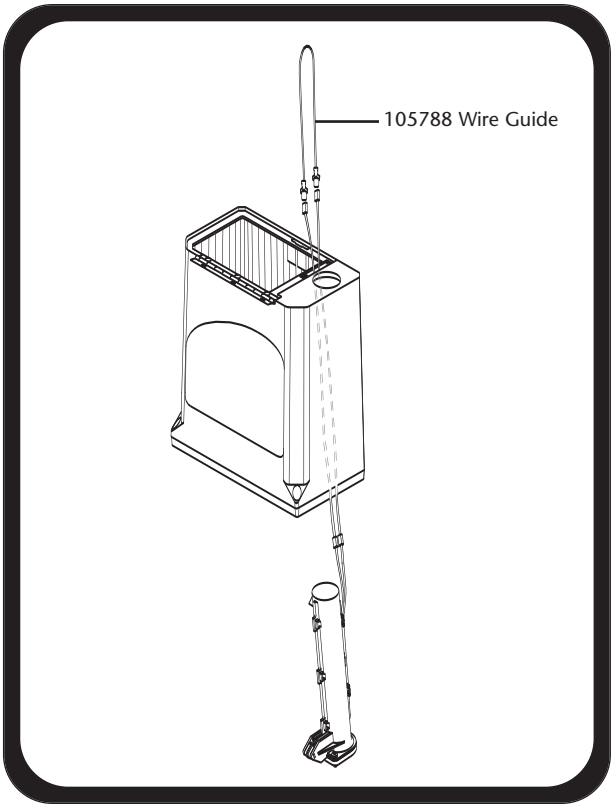
1. Separate left wand guide from right wand guide by inserting two fingers between two guides. Use a flat tip screwdriver with opposite hand to unsnap lock latches and pry open wand guides using your two fingers.

Note: Use care in prying open latches with screwdriver so as not to break tabs.

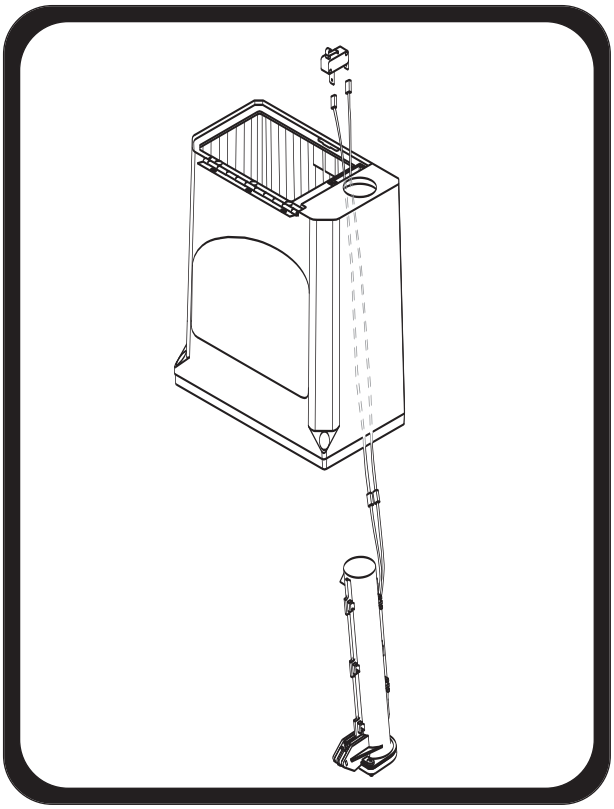


2. Switch Installation. Seat switch into the left wand guide. Snap lock latches together all the way up both sides of the wand guides.

WIRE GUIDE – For ProForce 1500XP Only

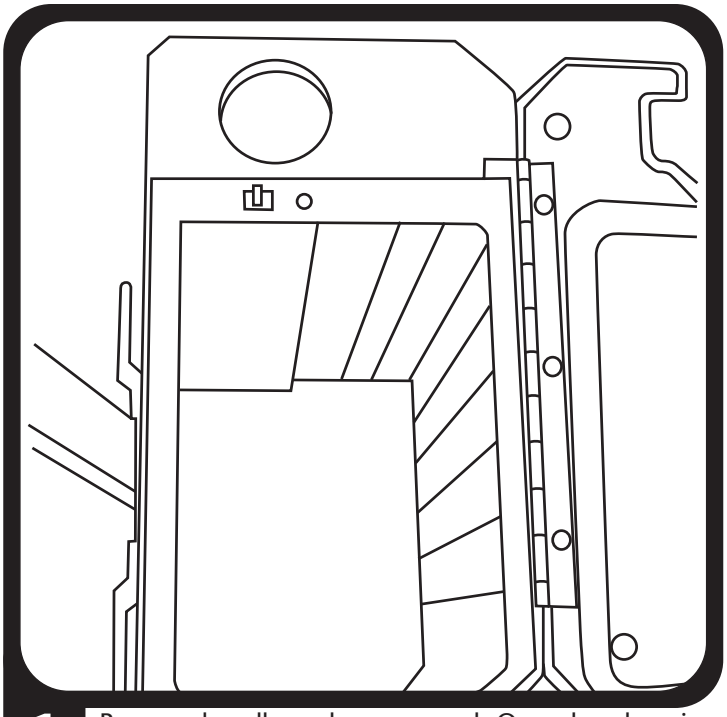


1. Call ProTeam Customer Service at 866.888.2168 to order wire guide #105788.
2. Insert wire guide into bag housing switch cavity. Make sure one wire is on either side of opening.
3. Thread wire guide through to the bottom of bag housing.
4. Attach wire guide to switch leads.
5. Pull wire guide back through the bag housing.

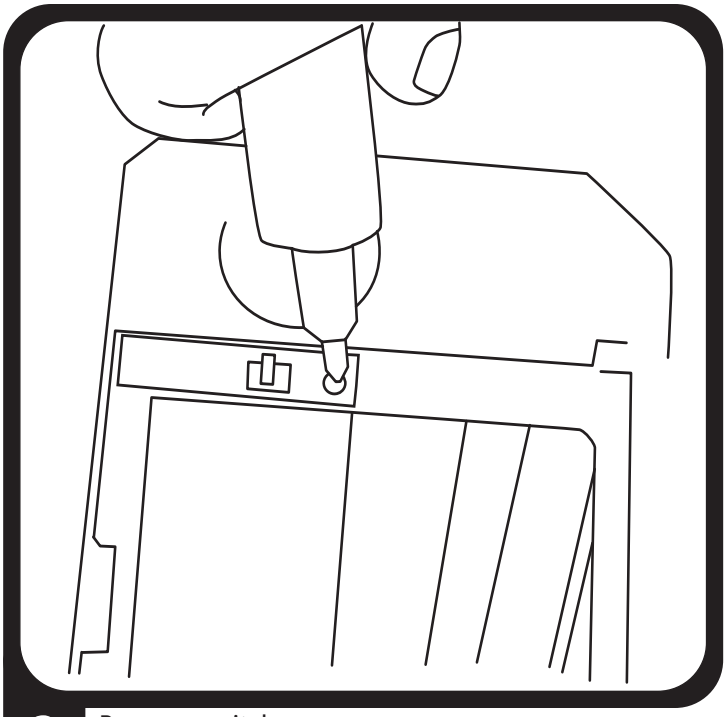


6. Remove wire guide and reinstall bag lockout switch.

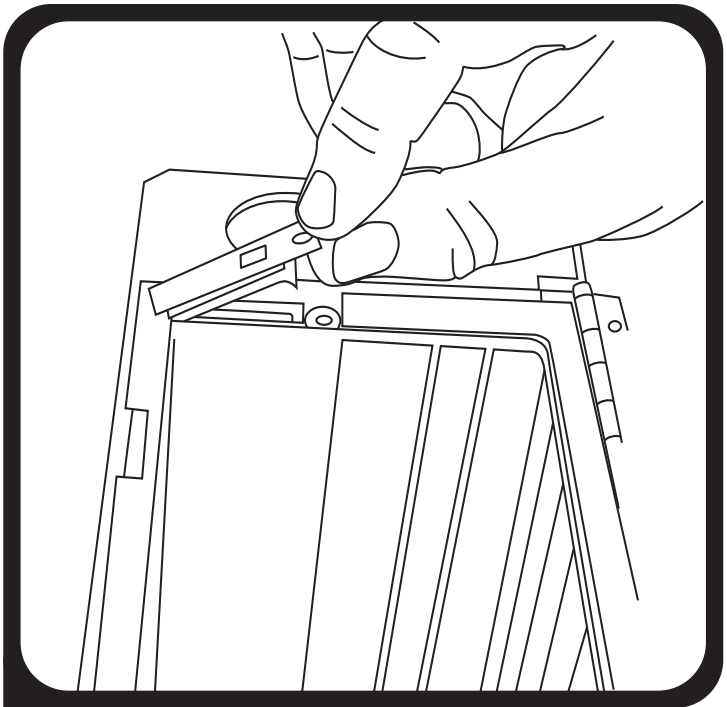
WIRE HARNESS REPLACEMENT



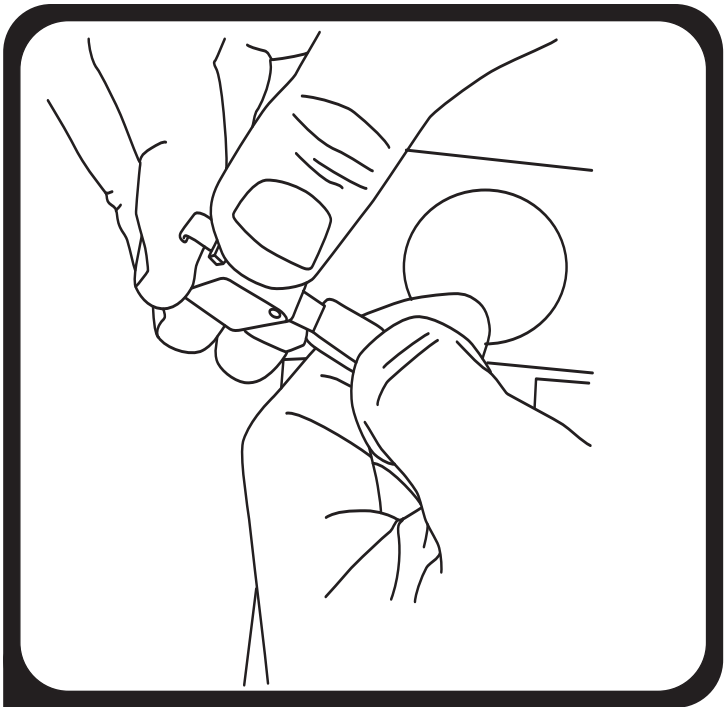
1. Remove handle and power cord. Open bag housing cover. Remove Intercept Micro Filter.



2. Remove switch cover screw.



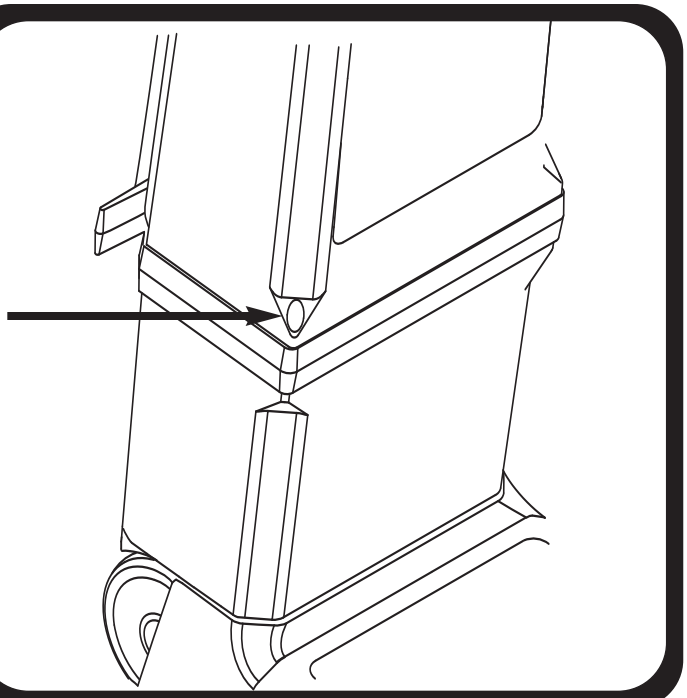
3. Remove switch cover and filter lockout switch. To remove the switch cover, insert a flathead screwdriver under switch lever and gently pry upward.



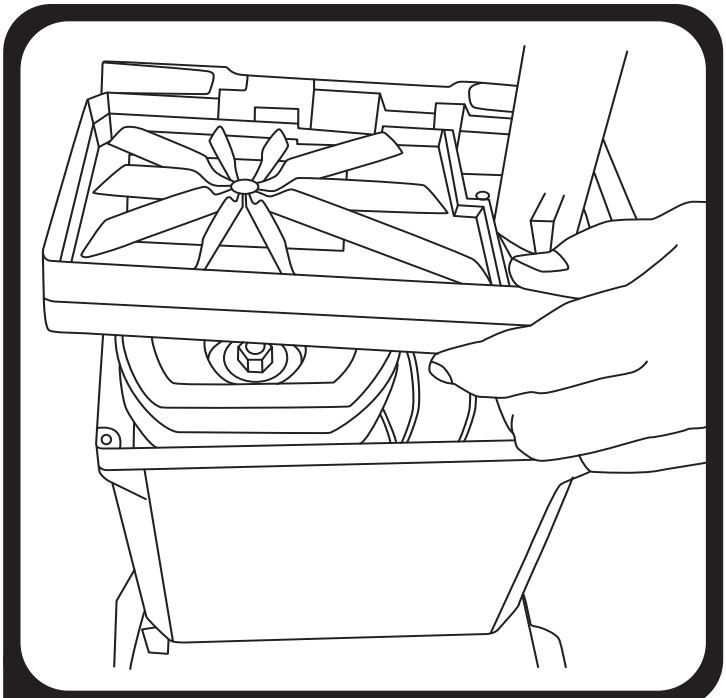
4. Remove crimps by pressing locking tab on connector.

(Continued on page 21)

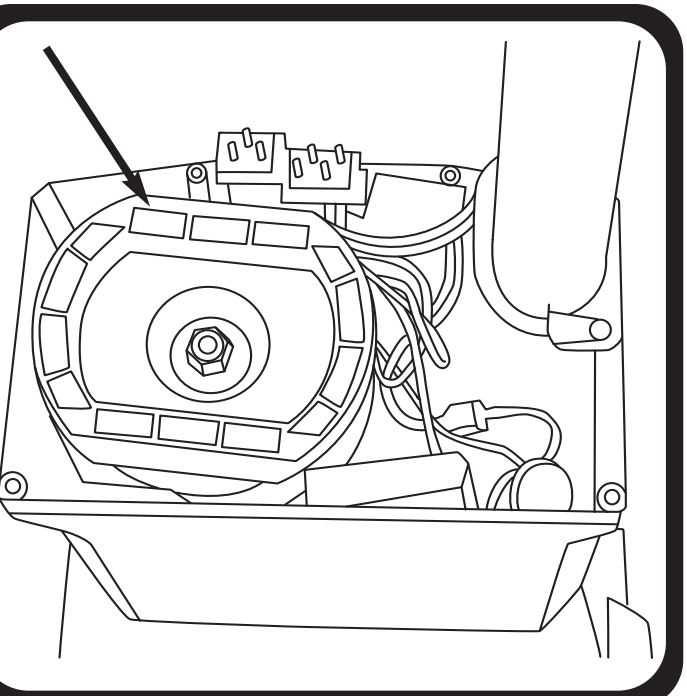
WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 20)



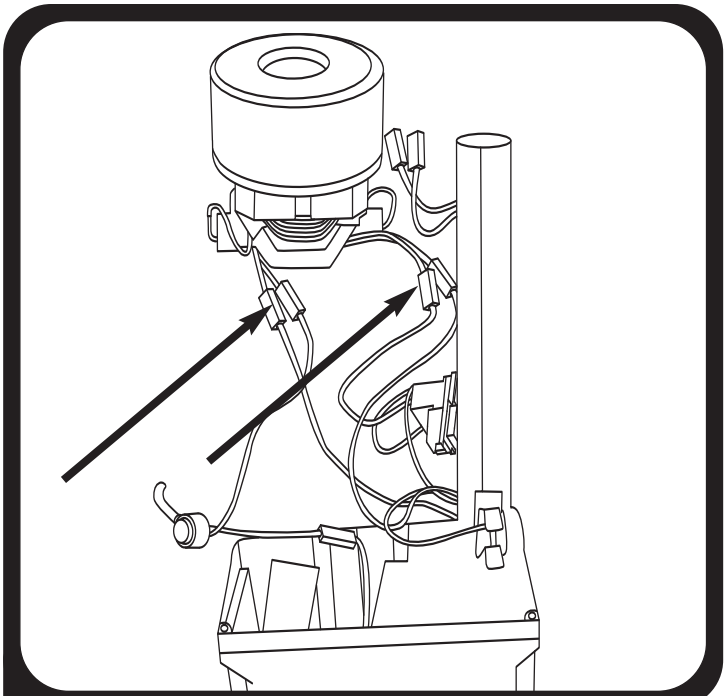
5. Remove (4) bag housing screws and remove bag housing.



6. Remove the bag full indicator tube (tube not pictured) from the bulkhead and lift off the bulkhead.



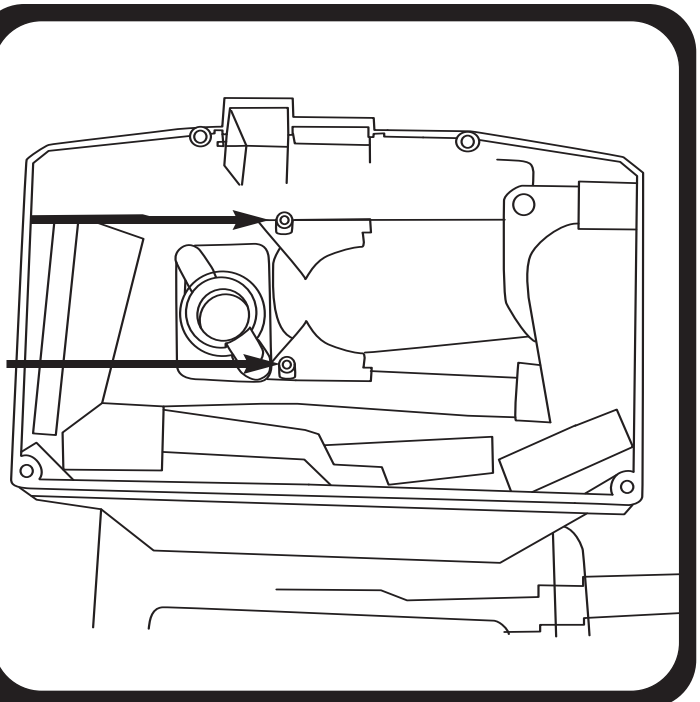
7. Remove upper motor mount.



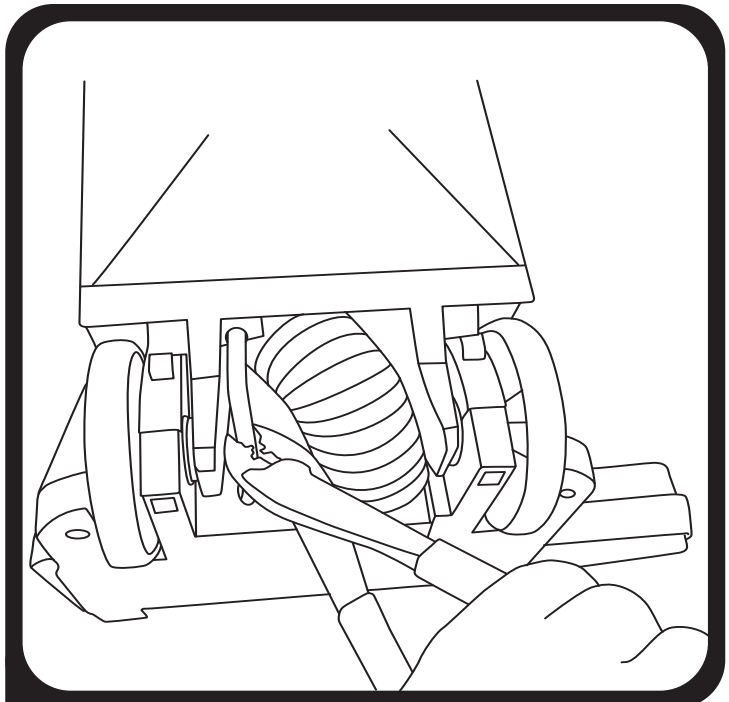
8. Disconnect motor crimps from motor and remove motor.

(Continued on page 22)

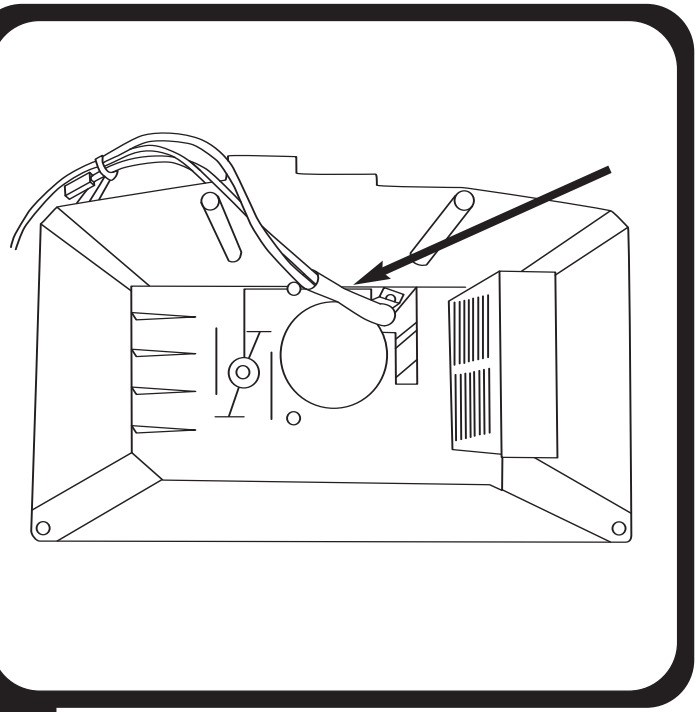
WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 21)



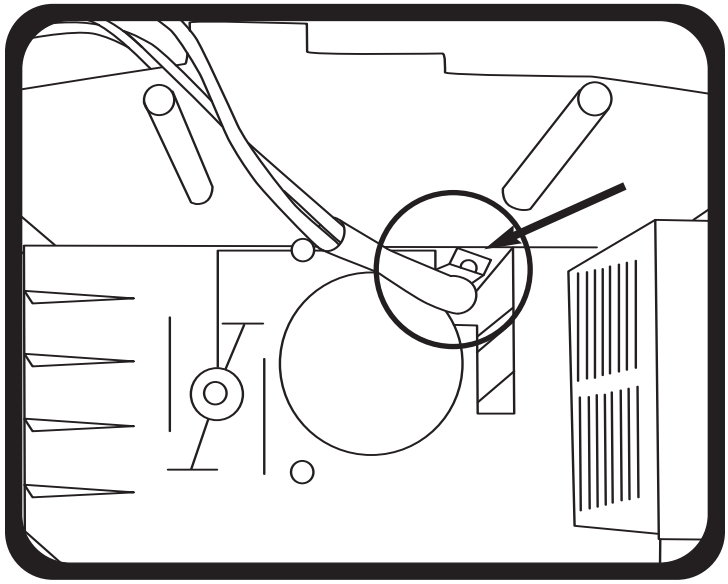
9. Remove (2) lower air duct screws from inside motor housing then remove the foam that covers wire harness.



10. Cut lower wire harness between the motor housing and the base assembly. Pull the air duct system, air duct hose and lower wire harness out of the motor housing.



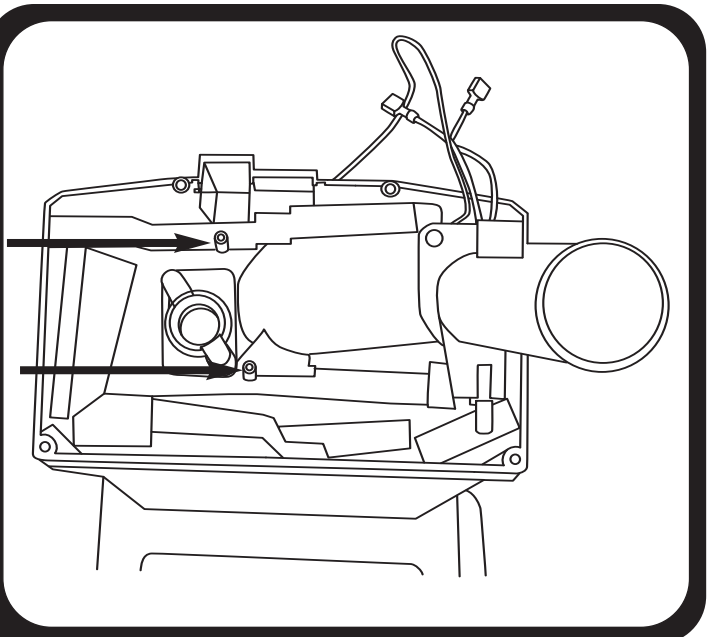
11. Insert new power nozzle wire harness in motor housing, locking brass fitting into position as shown.



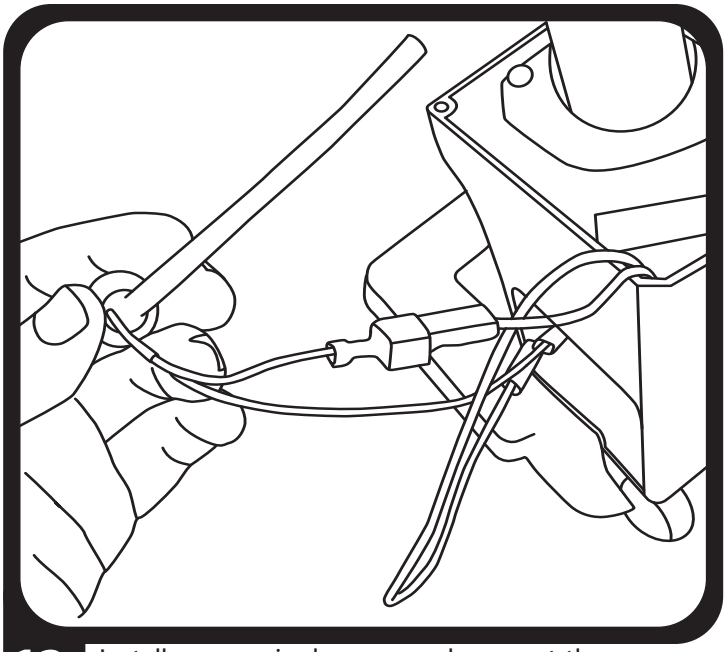
Note: Rotate brass fitting so it cannot be trapped by the lower duct.

(Continued on page 23)

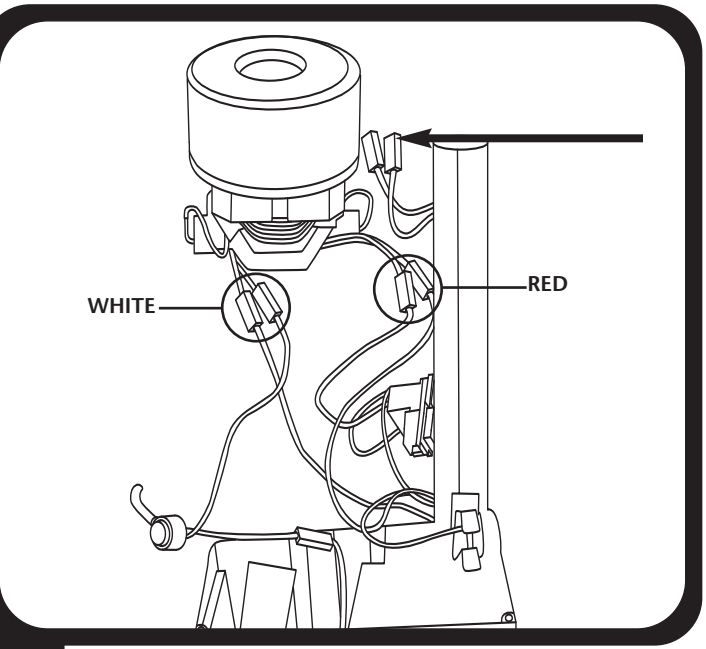
WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 22)



12. Install lower duct assembly and foam. Tighten (2) screws. Wire harness should remain behind lower duct assembly. Reinstall foam as shown.

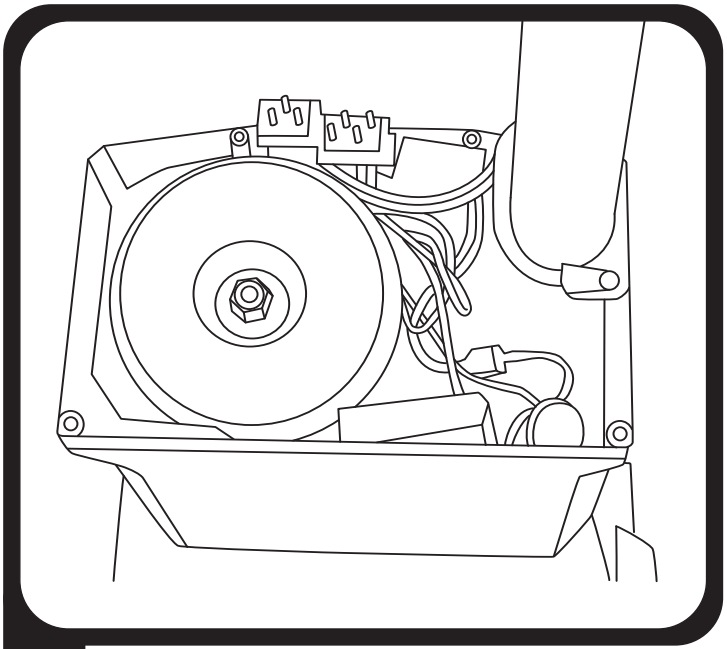


13. Install upper wire harness and connect the vacuum bag full sensor.



14. Connect wires as shown – Red to red. White to white.

Note: The two black wires are threaded up through the wand guide.

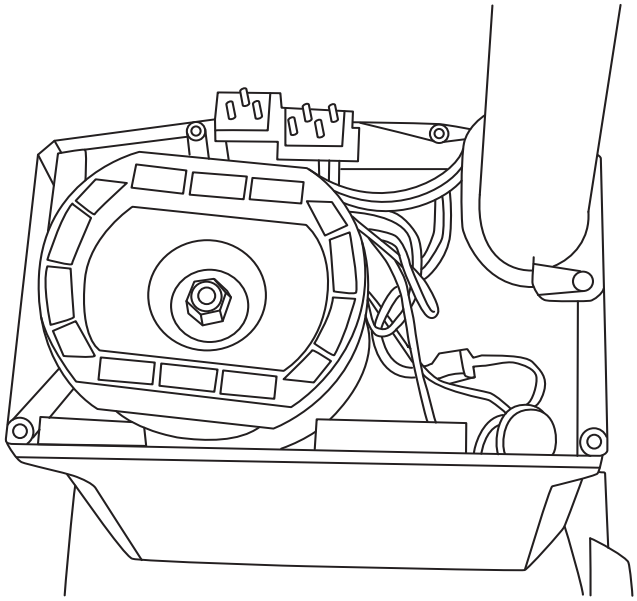


15. Replace vacuum motor as shown.

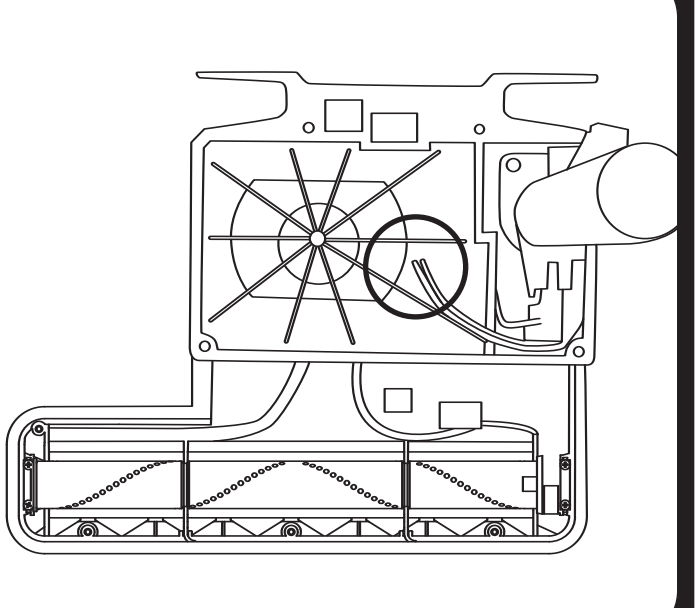
Note: motor must be properly seated. It is properly seated when the motor can no longer rotate easily. The bulkhead will not fully seat over the motor housing if the motor is not properly installed.

(Continued on page 24)

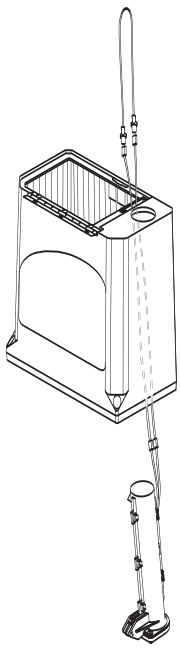
WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 23)



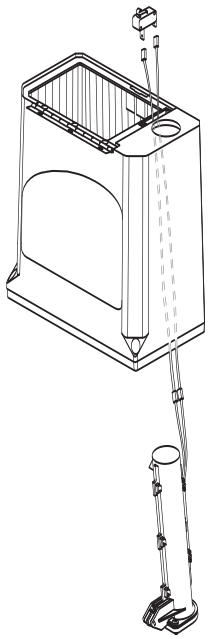
16. Replace sound foam and install the motor mount.



17. Tuck wires below bulkhead, leaving the bag full indicator tube out to insert into the bulkhead as shown. If the bulkhead does not seat firmly onto the motor housing, you must adjust the motor until the motor is properly installed.



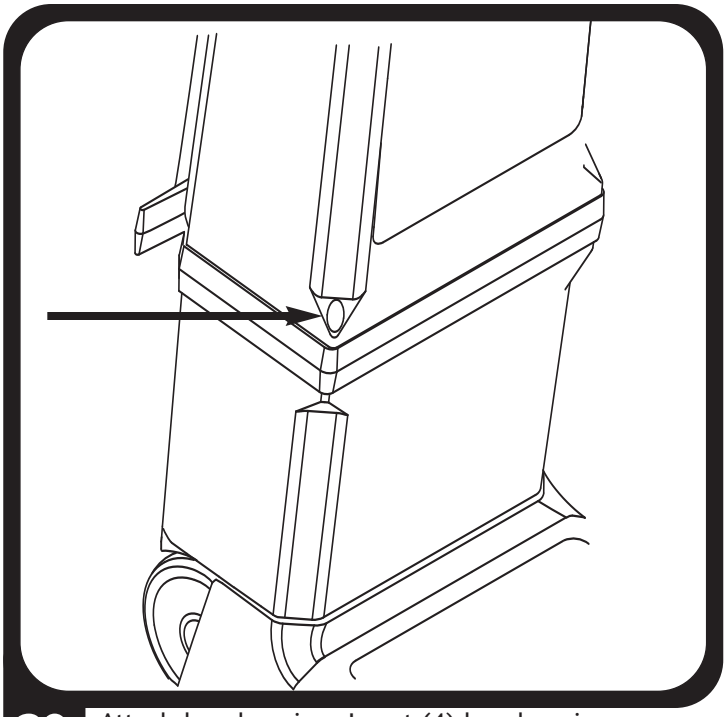
18. Insert wire guide into bag housing switch cavity. Make sure one wire is on either side of opening. Thread wire guide through to the bottom of bag housing. Attach wire guide to switch leads. Pull wire guide back through the bag housing.



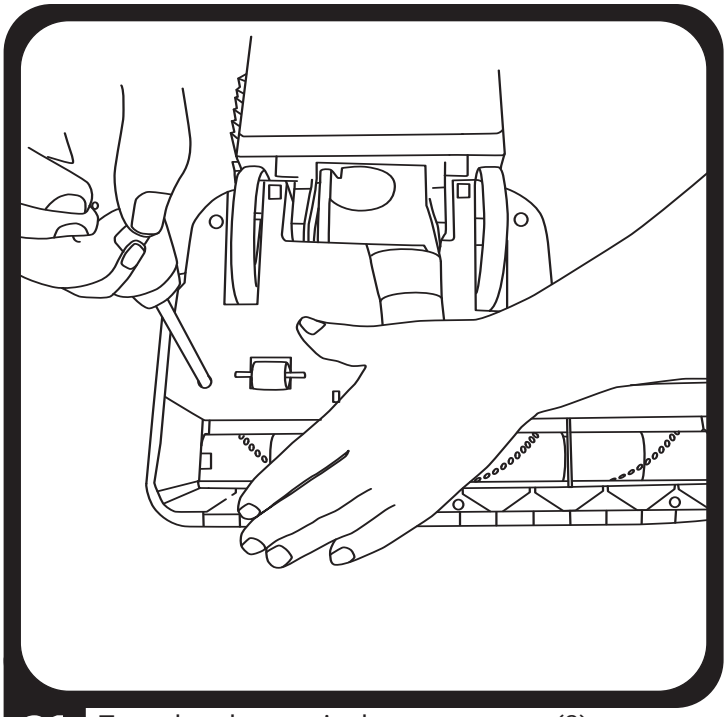
19. Remove wire guide and reinstall bag lockout switch.

(Continued on page 25)

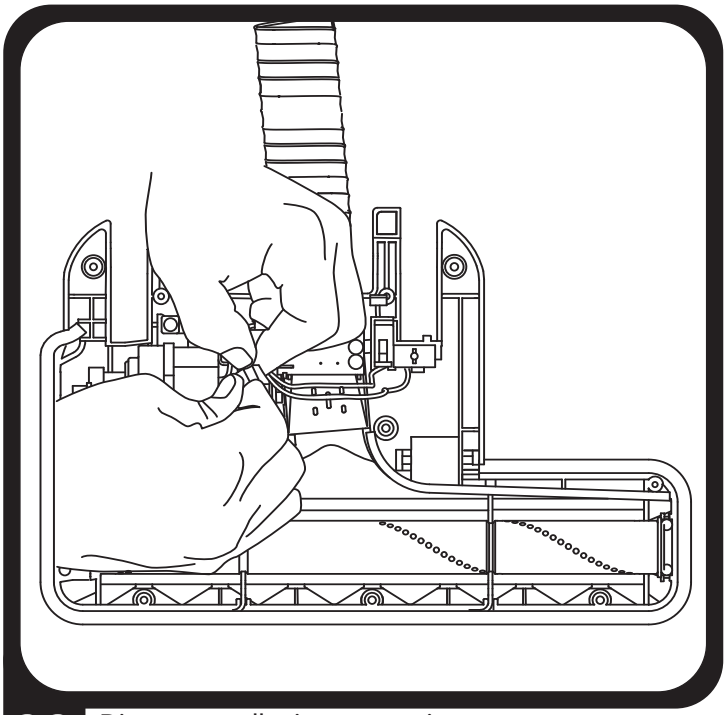
WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 24)



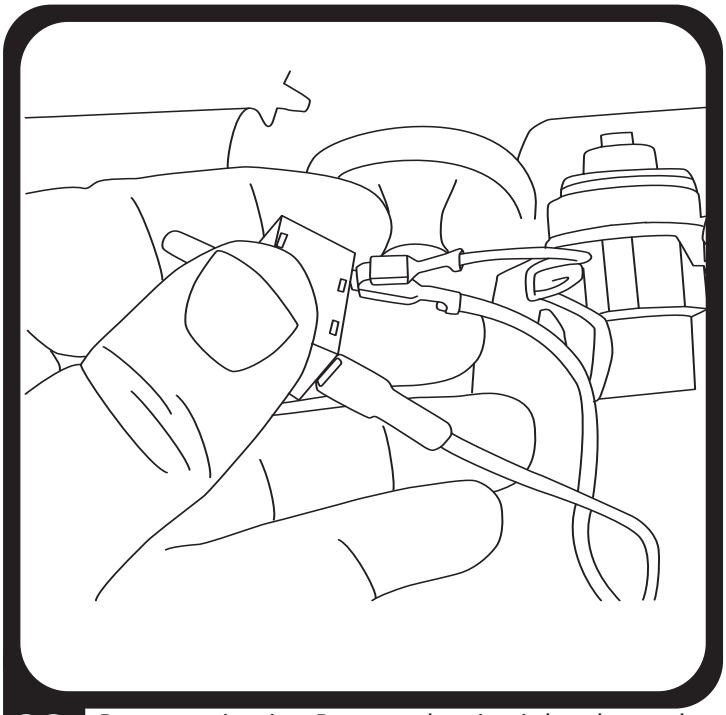
20. Attach bag housing. Insert (4) bag housing screws. Upper wire harness replacement now complete.



21. To replace lower wire harness remove (8) baseplate screws and turn vacuum back over to remove base cover.



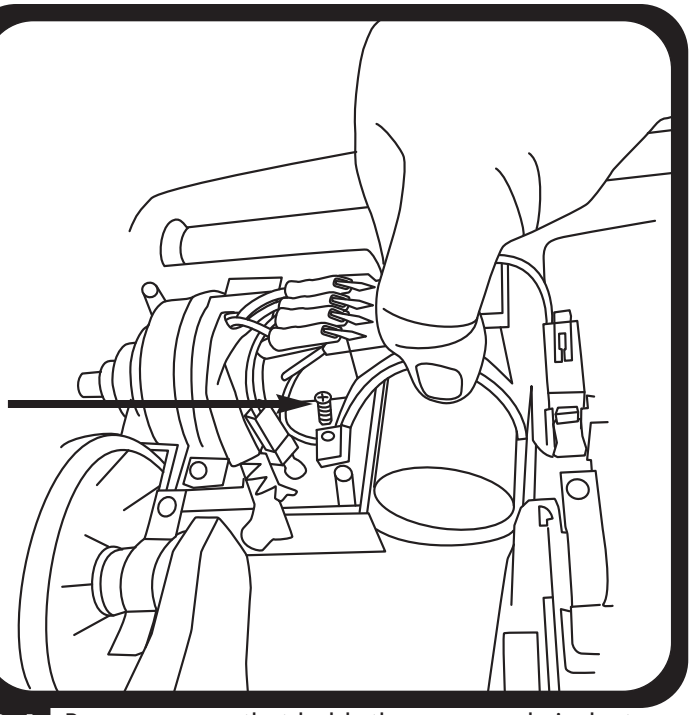
22. Disconnect all wire connections.



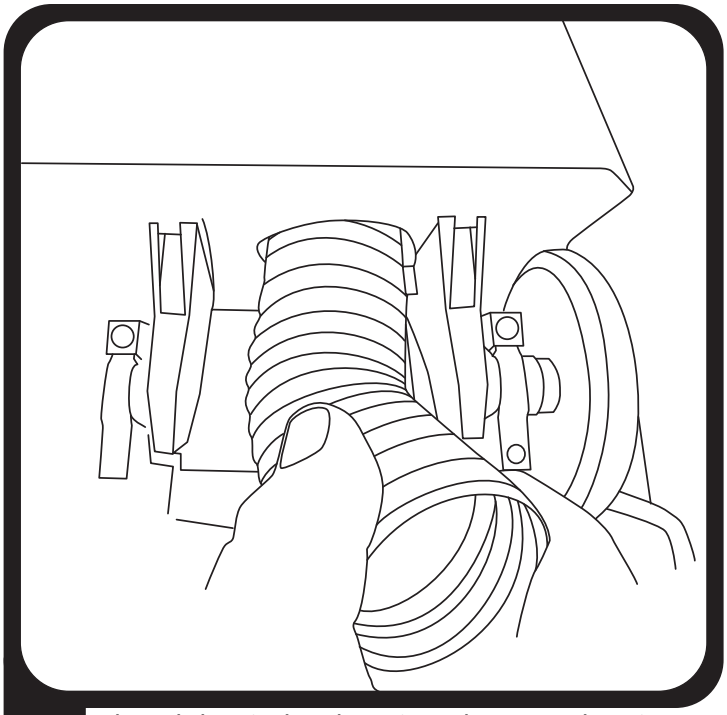
23. Remove wire ties. Remove the circuit breaker and power nozzle lockout switch. Do not remove power nozzle motor.

(Continued on page 26)

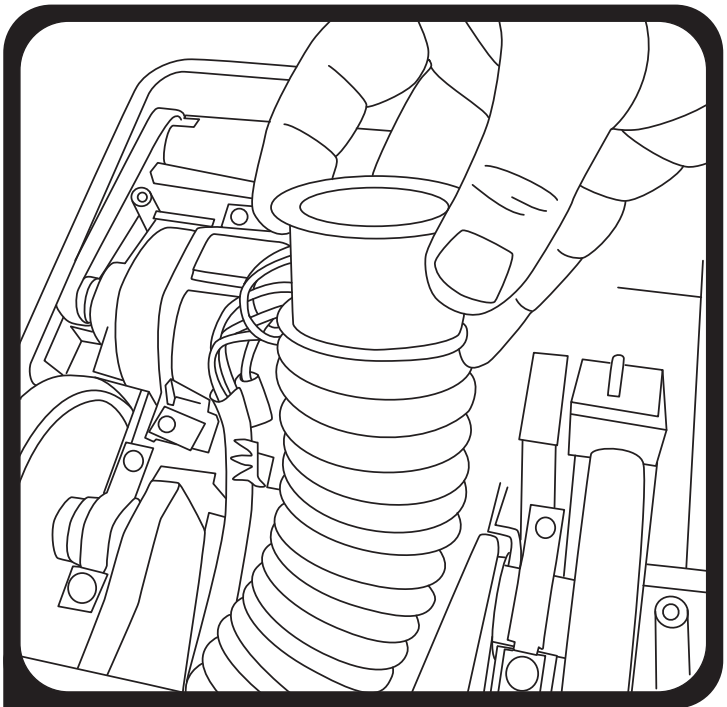
WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 25)



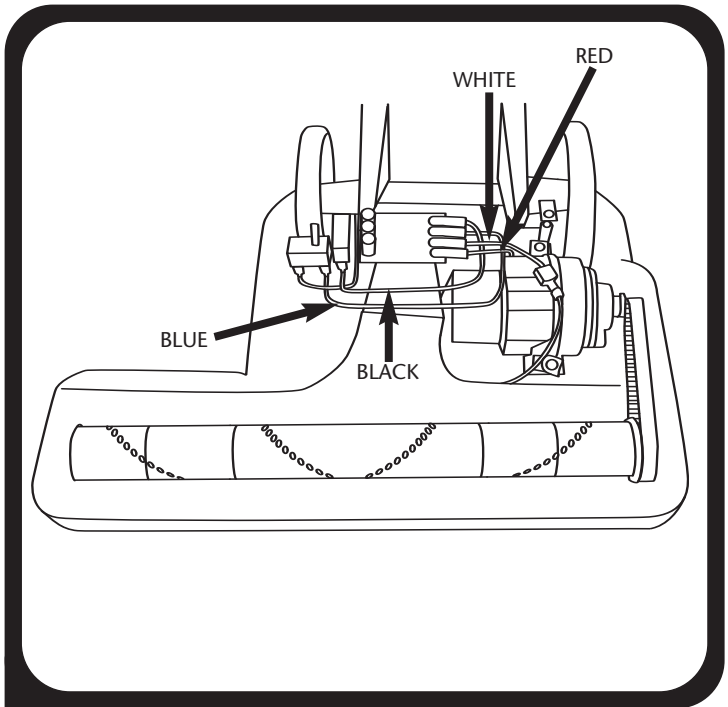
24. Remove screw that holds the cover and air duct.



25. Thread the air duct hose into the motor housing.



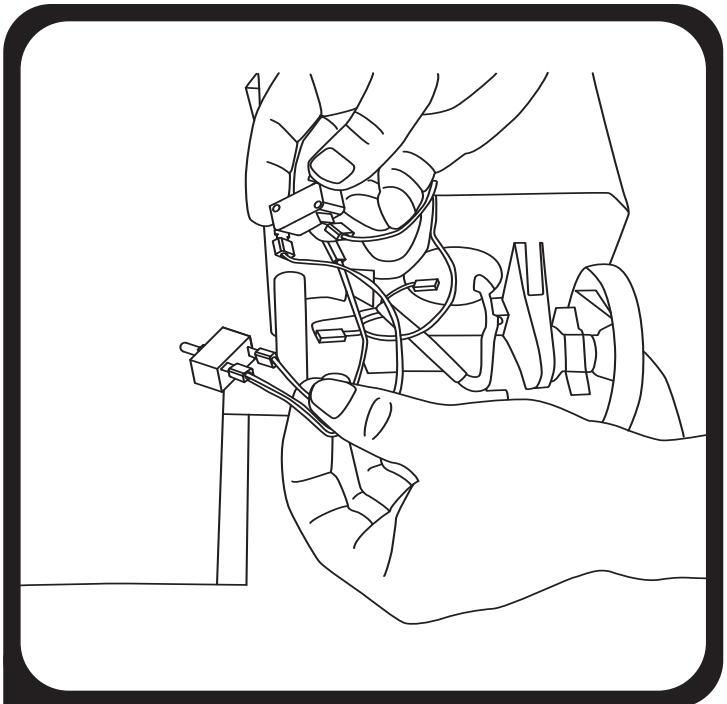
26. Put the hose sleeve into the other end of the hose and position in the base assembly. Replace the cover, air duct, and screw.



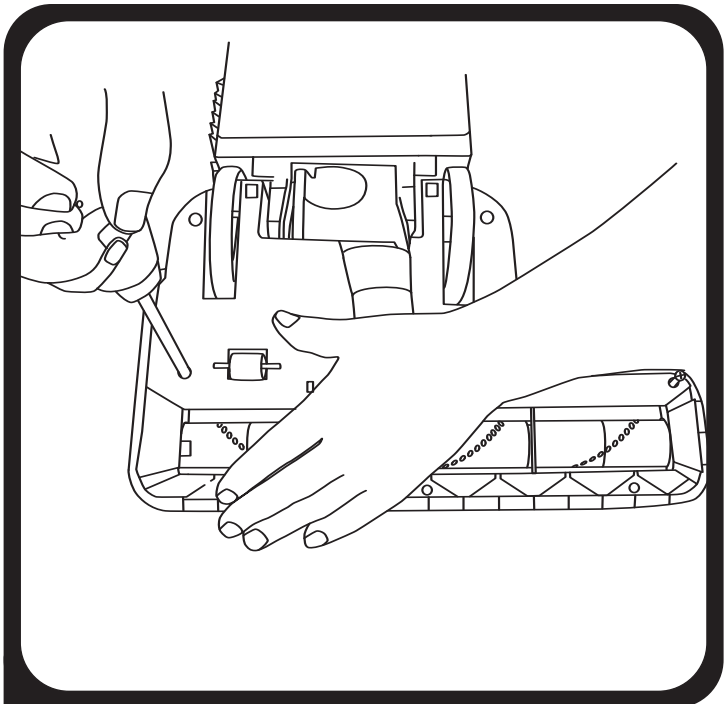
27. Connect wires as shown and verify orientation of switches.

(Continued on page 27)

WIRE HARNESS REPLACEMENT (CONTINUED FROM PG. 26)



28. Attach new blue and black wires.



29. Replace base cover and screws.

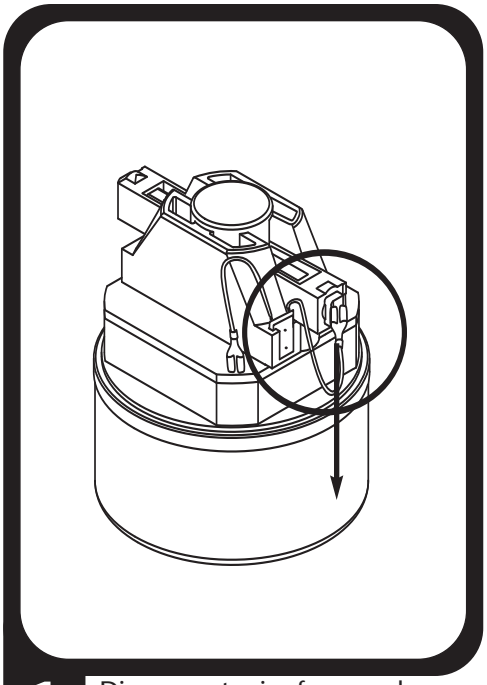
To Reassemble.
Reverse Steps 29 through 1 to finish reassembly.

TO PERFORM A FUNCTION TEST:

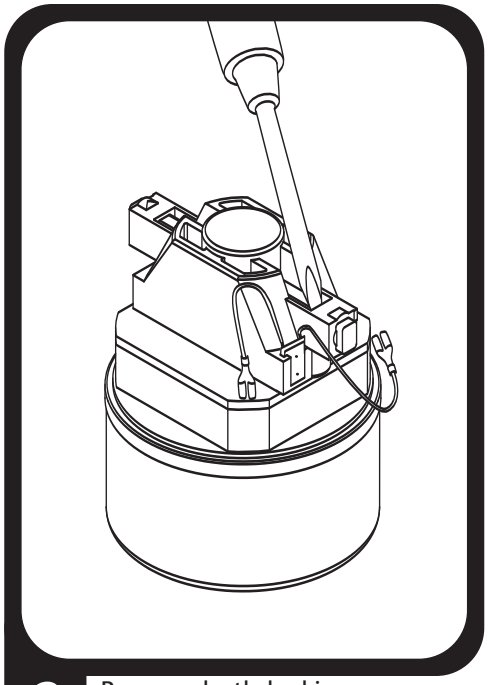
1. Reinstall handle assembly and cord.
2. Install Intercept Micro Filter.
3. Plug in vacuum and turn vacuum on in the number two (II) position.
4. Powerhead motor should be running. Release vacuum from upright locked position.
5. The brush roll motor should stop and the red warning light should light up. Release the switch and the powerhead should go back to normal operation.
6. Turn the vacuum on in position number one (I). The vacuum motor should be on. Pull out the wand and cover the end of the wand with your hand. This will simulate blockage and the bag full light should come on. Take your hand off the end of the wand and the light should turn off. If your vacuum passes these tests, your vacuum is ready to use.

Motor

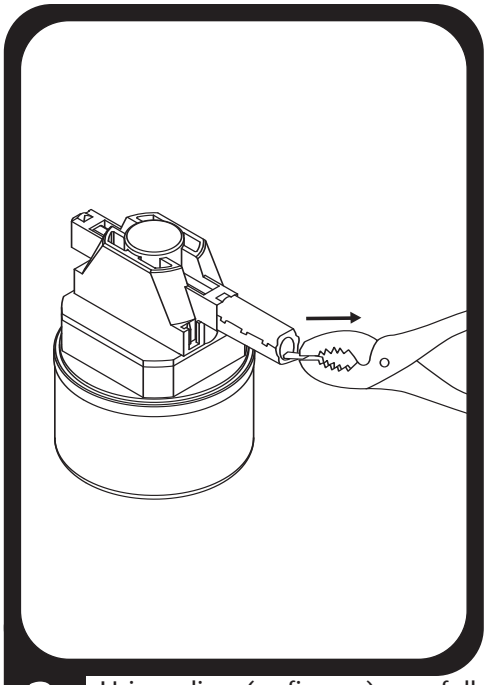
REMOVING CARBON BRUSHES



1. Disconnect wire from carbon brush.

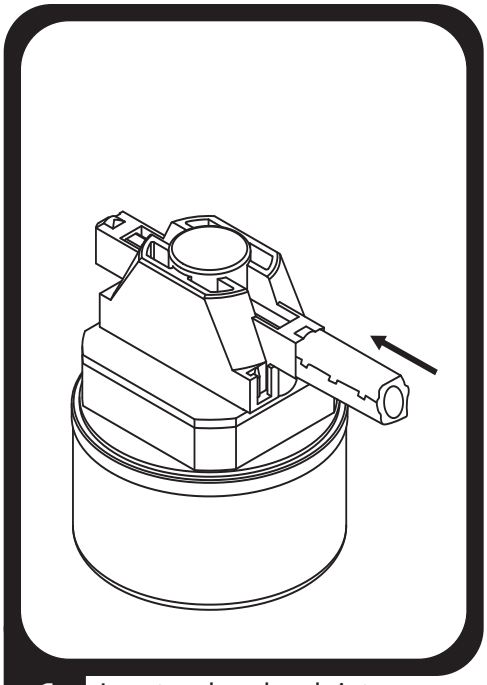


2. Remove both locking connectors with small flat tip screwdriver. Press brass tab (inside bracket) down so it is flush with brush.

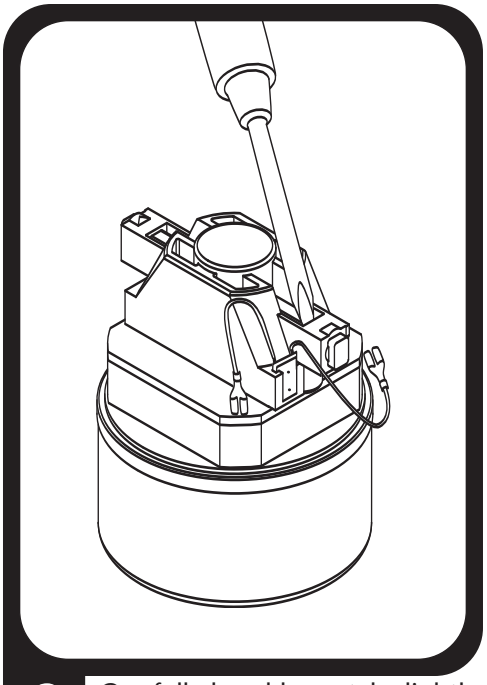


3. Using pliers (or fingers), carefully grasp tab and remove carbon brush from bracket

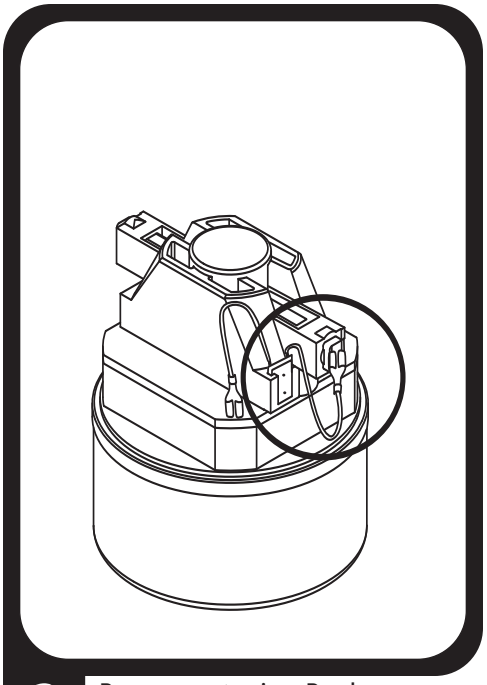
INSTALLING CARBON BRUSHES



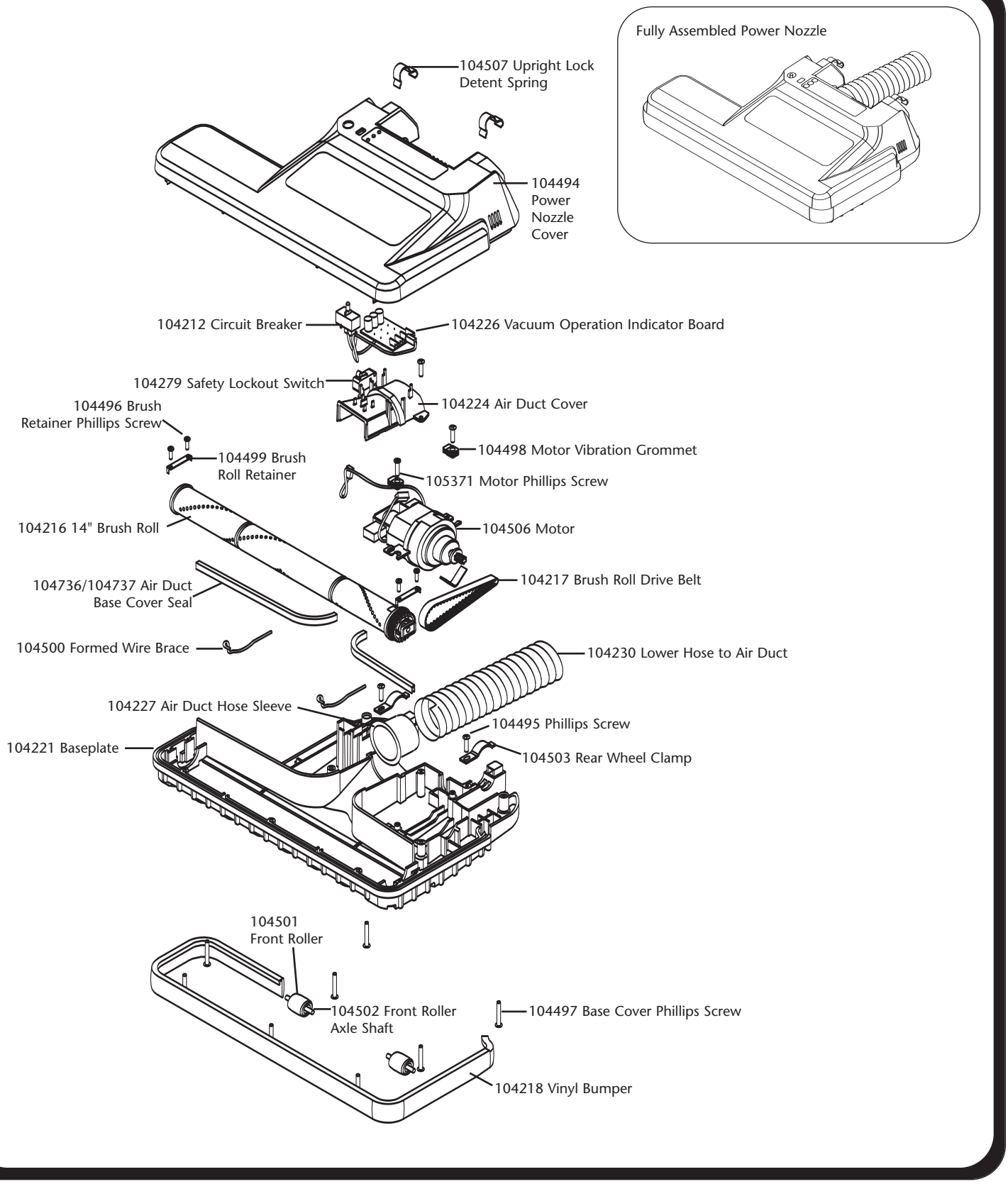
1. Insert carbon brush into bracket.



2. Carefully bend brass tab slightly upward with small flat tip screwdriver.

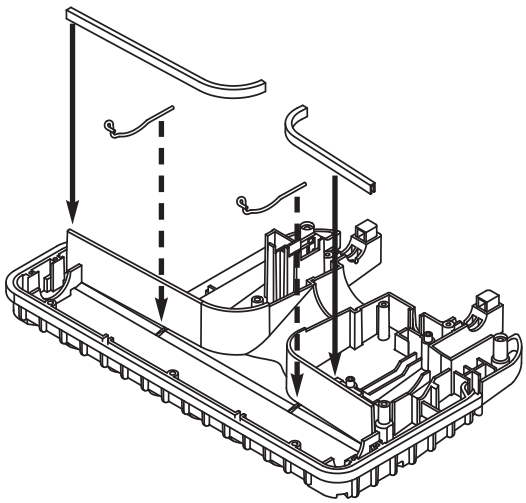


3. Re-connect wire. Replace locking tabs. Bend tabs downward.

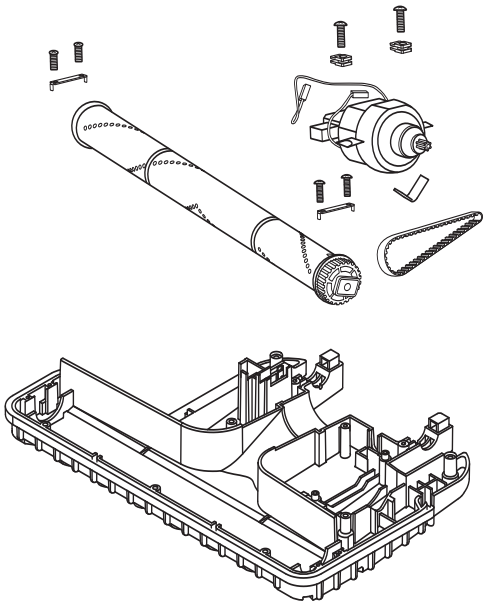

Fully Assembled Power Nozzle
104507 Upright Lock Detent Spring
104494 Power Nozzle Cover
104212 Circuit Breaker
104226 Vacuum Operation Indicator Board
104279 Safety Lockout Switch
104224 Air Duct Cover
104496 Brush Retainer Phillips Screw
104498 Motor Vibration Grommet
104499 Brush Roll Retainer
105371 Motor Phillips Screw
104216 14" Brush Roll
104506 Motor
104736/104737 Air Duct Base Cover Seal
104217 Brush Roll Drive Belt
104500 Formed Wire Brace
104230 Lower Hose to Air Duct
104227 Air Duct Hose Sleeve
104495 Phillips Screw
104221 Baseplate
104503 Rear Wheel Clamp
104501 Front Roller
104502 Front Roller Axle Shaft
104497 Base Cover Phillips Screw
104218 Vinyl Bumper

Power Nozzle

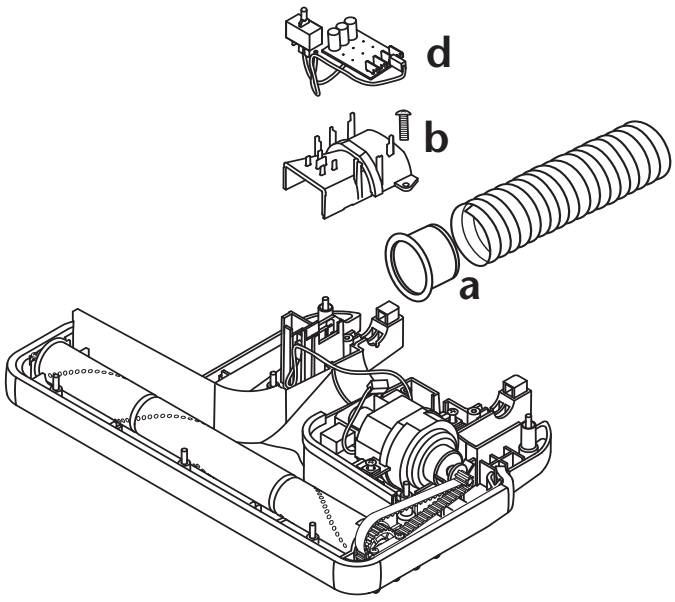
ASSEMBLY



1. Insert braces and seals.

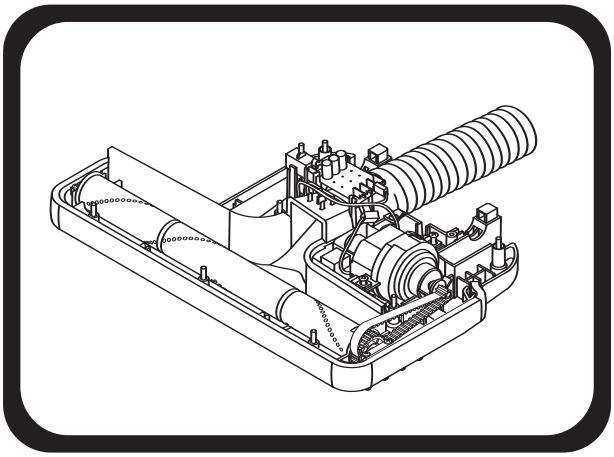


2. Install motor, brush roll, and belt. Be careful. Do not attempt to over-tighten screws.



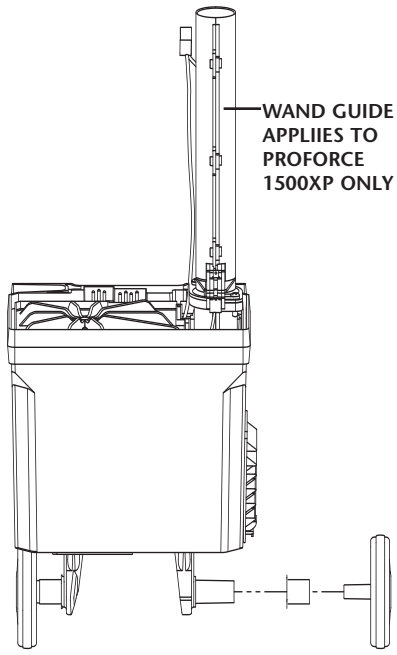
3. Additional components:

a) Install sleeve and hose.
b) Install duct cover.
c) Install electronic components, SPI board, circuit breaker, and switch.
d) Attach jumper wire to SPI board.
e) Make sure components are properly seated in the base.

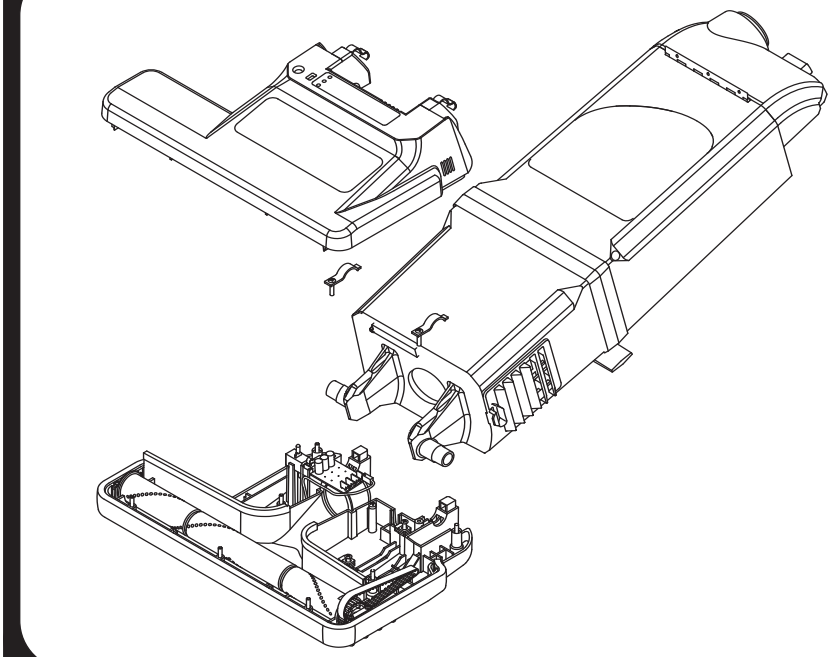


Fully assembled power nozzle (bottom view).

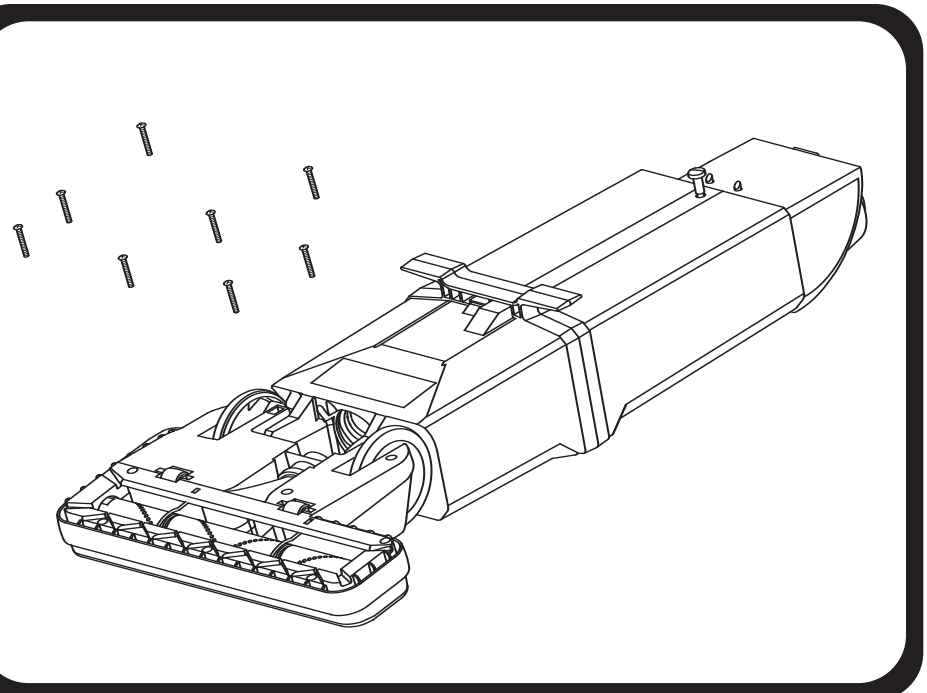
ASSEMBLY



1. Place axle sleeve onto motor axle, making sure the shoulder is facing the motor housing. Put wheel onto motor housing axle.

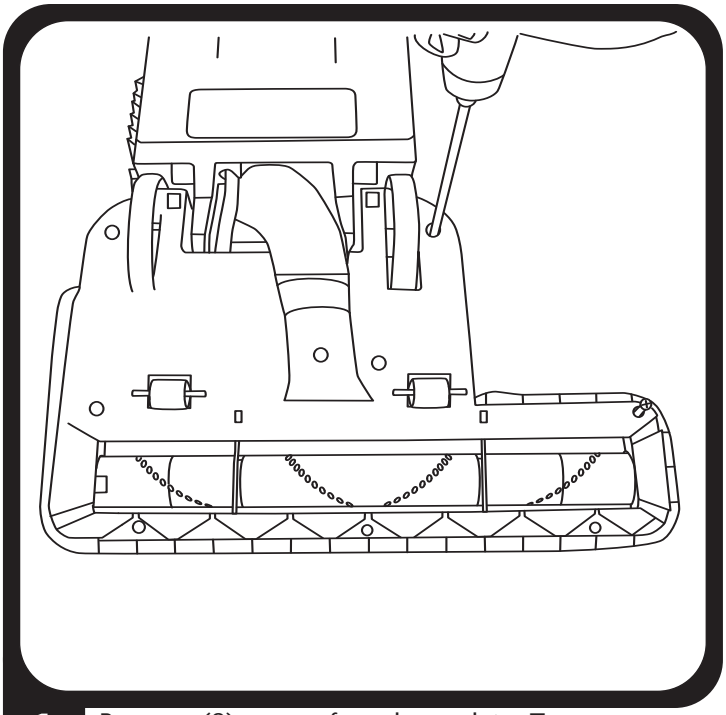


2. Wheel axles on the motor housing should be placed in the grooves on the power nozzle base. Wheel clamps are then put into place and screwed down. Power nozzle cover will then be placed on top of the base.

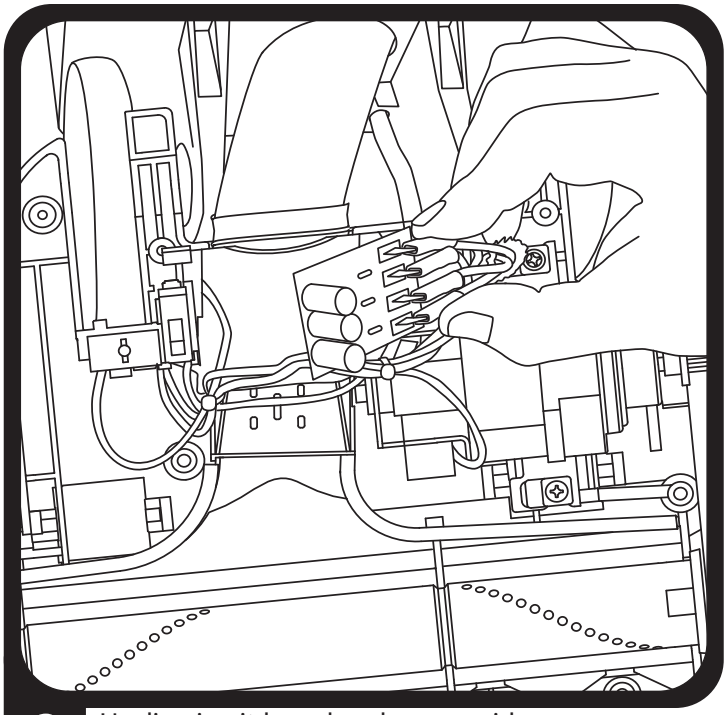


3. Flip the unit and fasten cover to power nozzle base using (8) screws.

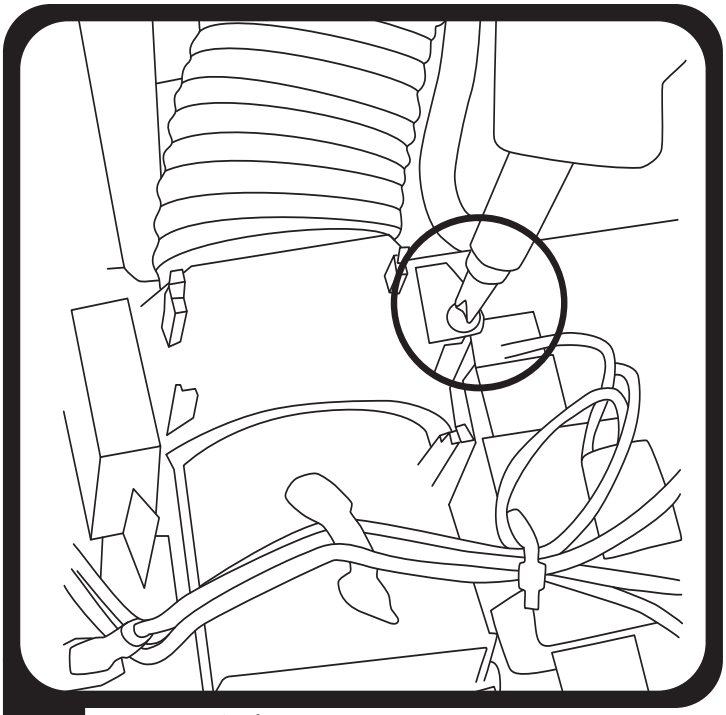
HOSE SLEEVE REPLACEMENT



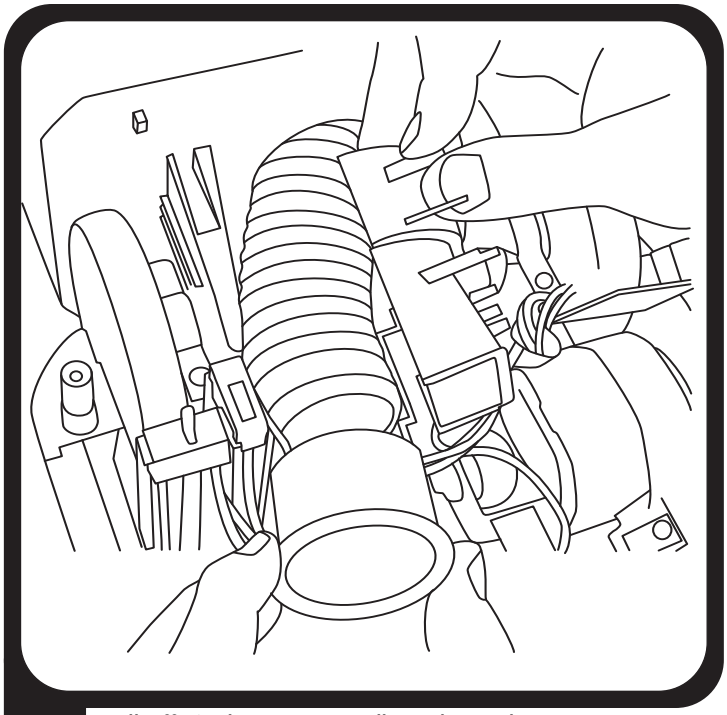
1. Remove (8) screws from base plate. Turn vacuum over and pull base cover off powerhead.



2. Unclip circuit board and move aside.

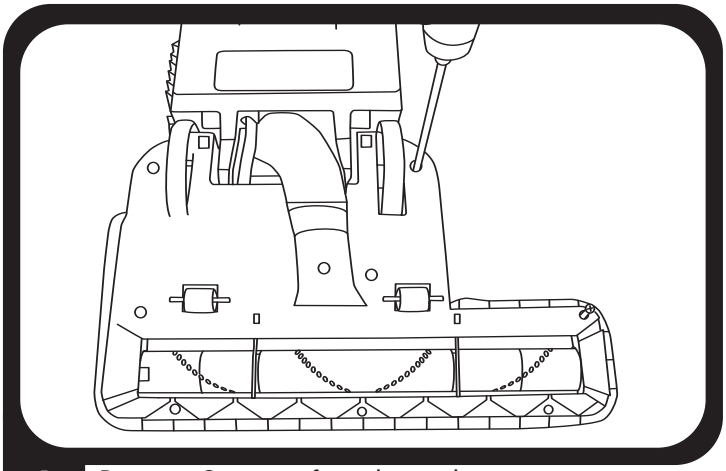


3. Unscrew air duct cover.

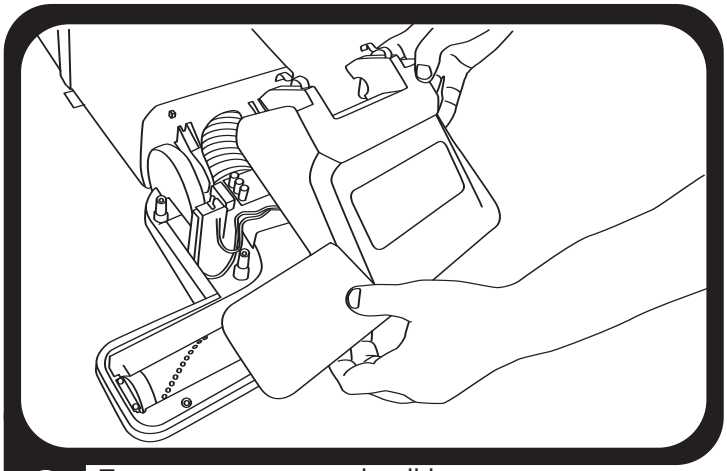


4. Pull off air duct cover. Pull out hose sleeve. Replace with new sleeve. Sleeve must sit in groove to be properly seated. Reverse steps to reassemble.

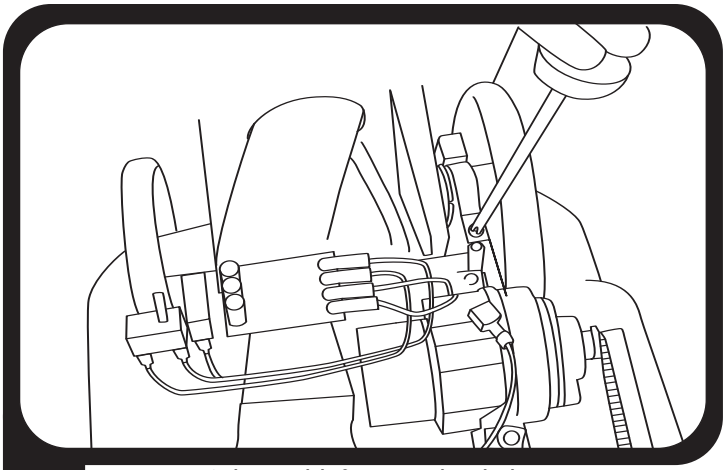
PIVOT BEARING REPLACEMENT/WHEEL REPLACEMENT



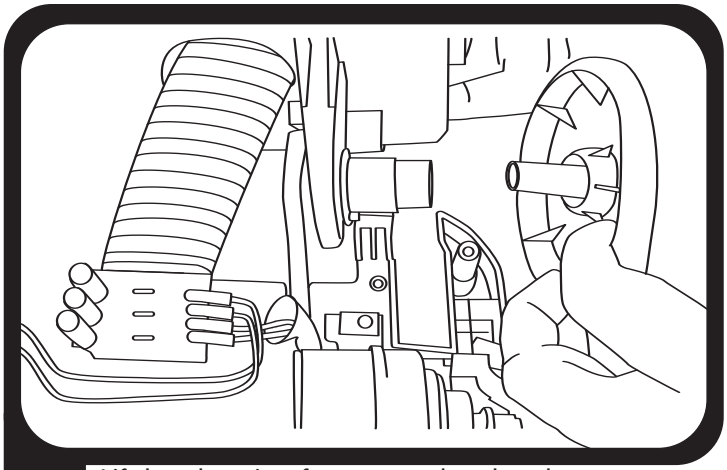
1. Remove 8 screws from base plate.



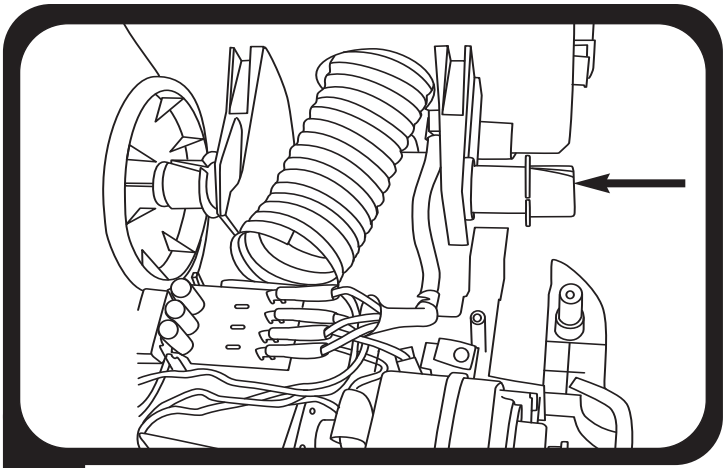
2. Turn vacuum over and pull base cover off powerhead.



3. Remove right and left rear wheel clamps.



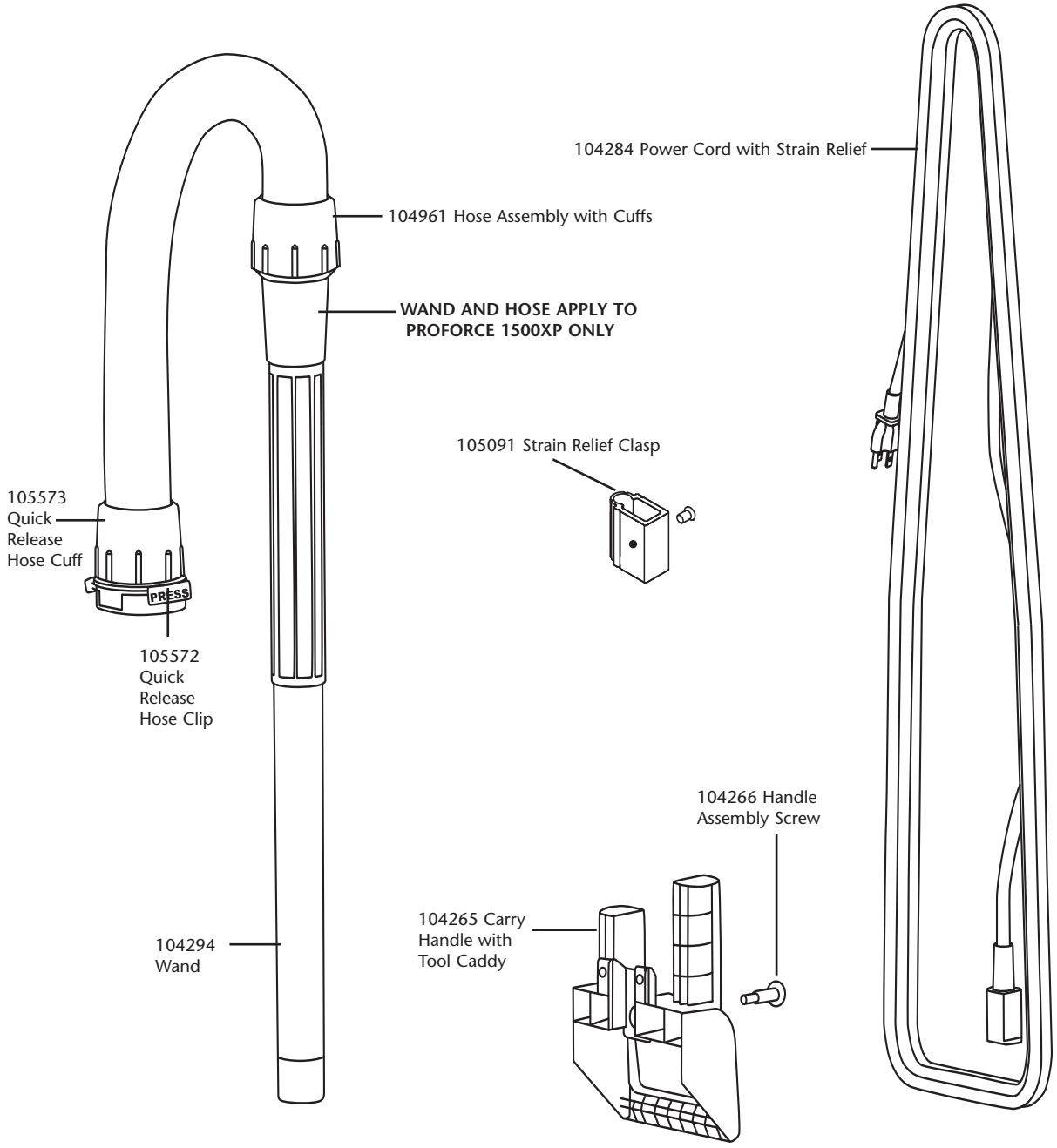
4. Lift bag housing from powerhead and remove wheel.

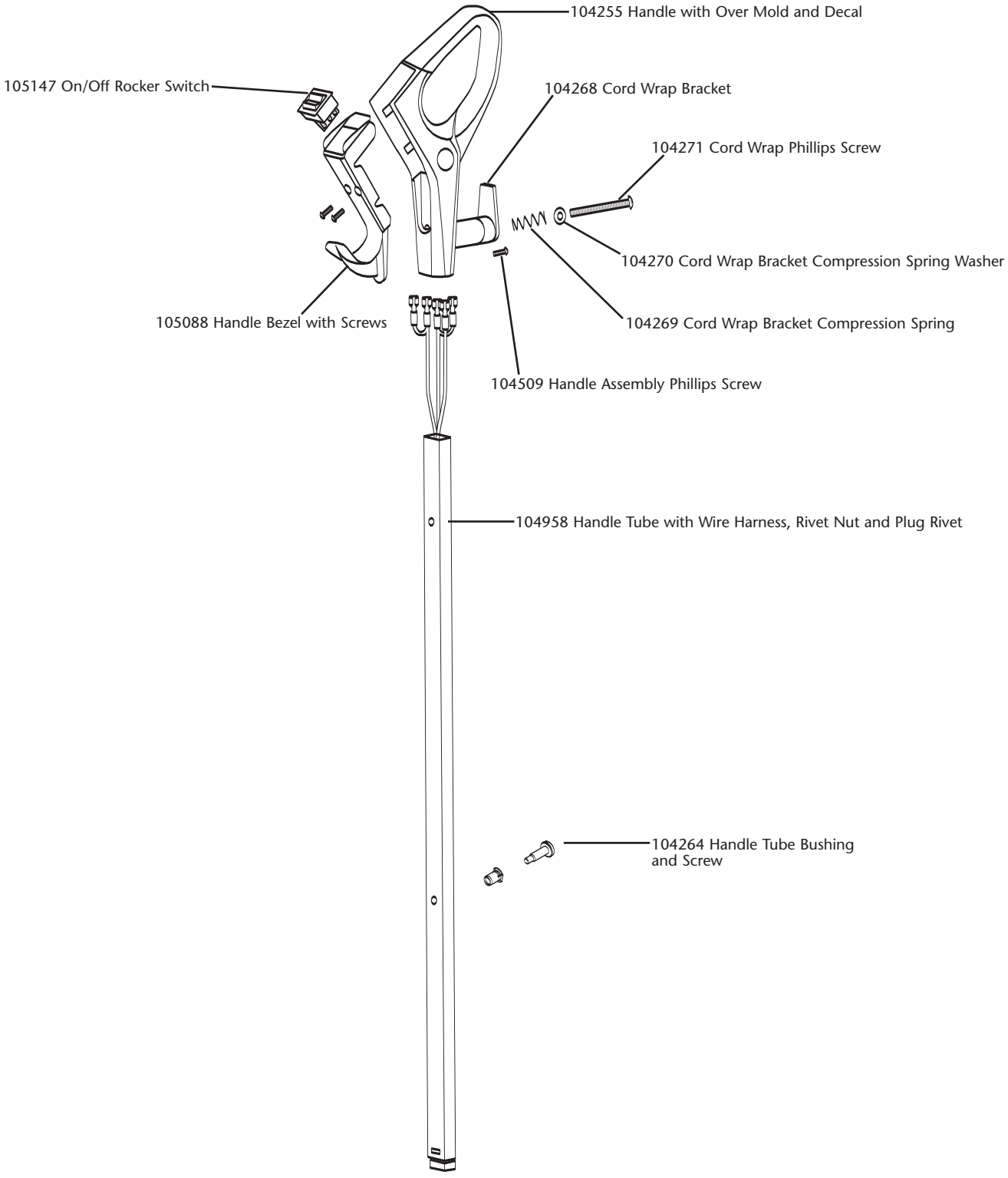


5. Remove old pivot bearing. Install new pivot bearing.

To Reassemble.
Repeat steps in reverse.

Hose and Power Cord


104284 Power Cord with Strain Relief
104961 Hose Assembly with Cuffs
WAND AND HOSE APPLY TO PROFORCE 1500XP ONLY
105091 Strain Relief Clasp
105573 Quick Release Hose Cuff
PRESS
105572 Quick Release Hose Clip
104266 Handle Assembly Screw
104265 Carry Handle with Tool Caddy
104294 Wand


104255 Handle with Over Mold and Decal
105147 On/Off Rocker Switch
104268 Cord Wrap Bracket
104271 Cord Wrap Phillips Screw
104270 Cord Wrap Bracket Compression Spring Washer
105088 Handle Bezel with Screws
104269 Cord Wrap Bracket Compression Spring
104509 Handle Assembly Phillips Screw
104958 Handle Tube with Wire Harness, Rivet Nut and Plug Rivet
104264 Handle Tube Bushing
and Screw

Handle

HANDLE ASSEMBLY

fig. 1

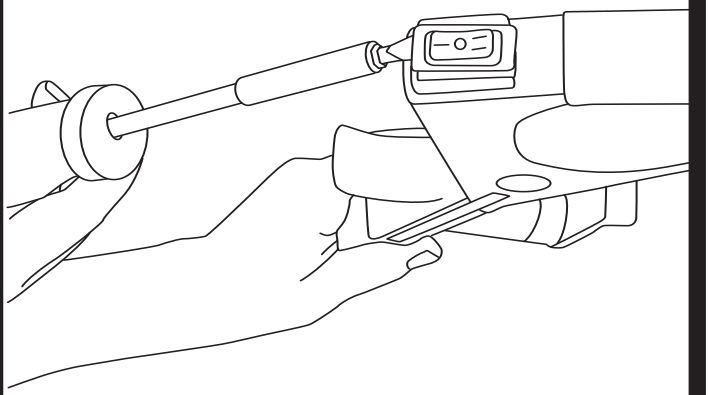
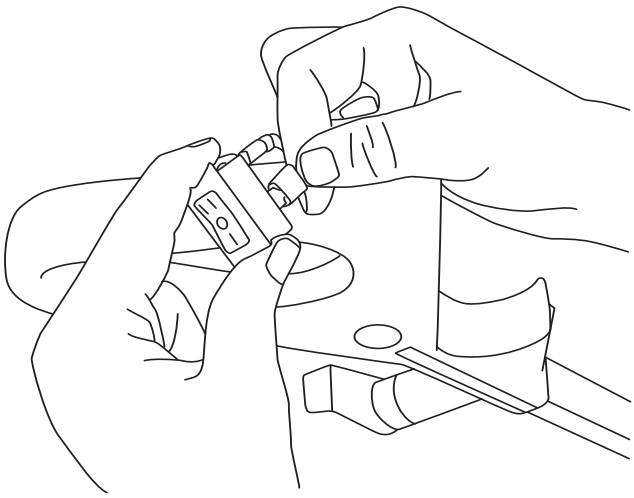
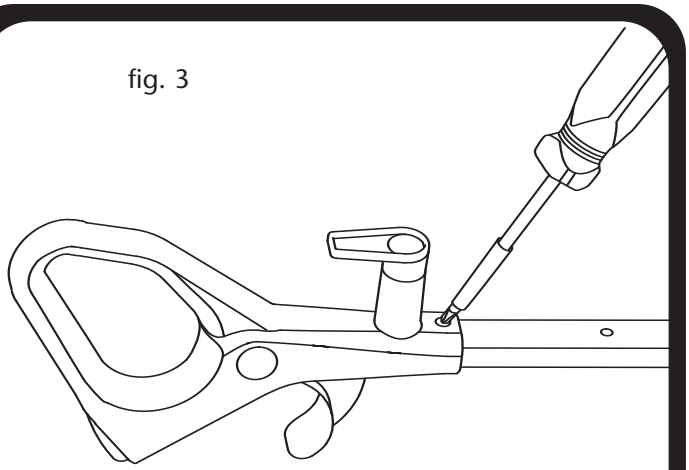


fig. 2



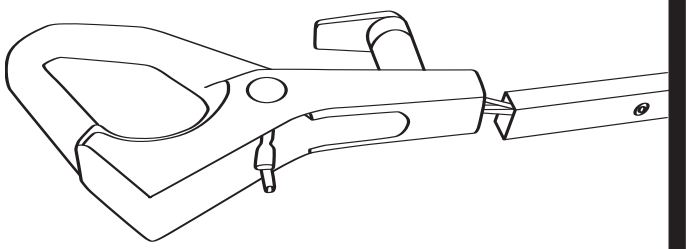
1. Use a flathead screwdriver (fig. 1) to pry bottom of switch from the handle body. Disconnect all wires from switch posts by depressing locking tab on base of crimps. (Fig. 2)

fig. 3



2. Remove screw at base of handle and remove from handle tube (fig. 3).

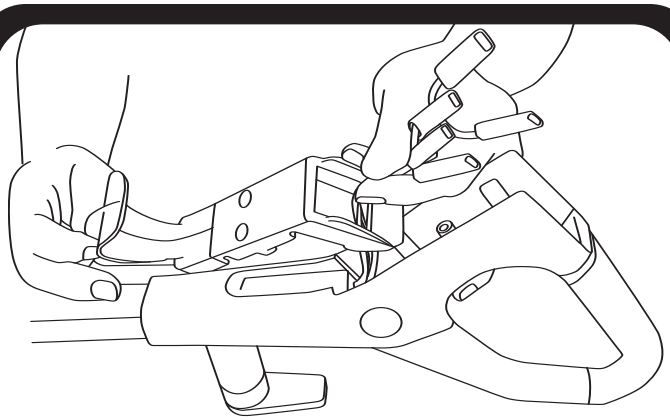
fig. 4



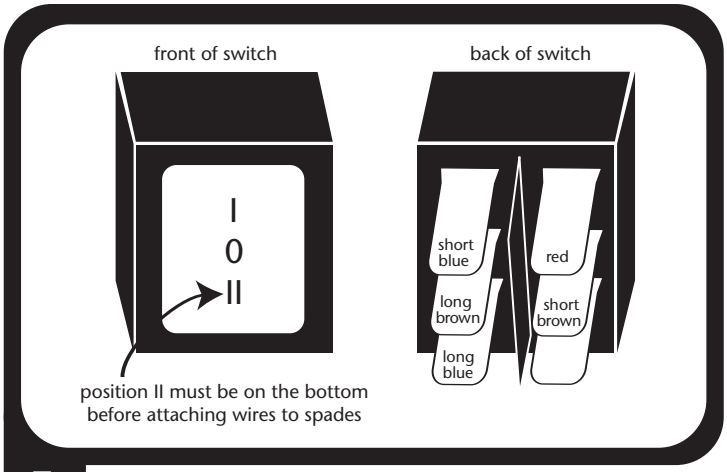
3. Feed handle wire harness through new handle and replace screw at the base of the handle (fig. 4).

(Continued on page 37)

HANDLE ASSEMBLY (CONTINUED FROM PG. 36)



4. Feed wires through opening on handle bezel.



5. Using the diagram provided above, attach wires to switch. Orient the switch box with the II position on the down side.

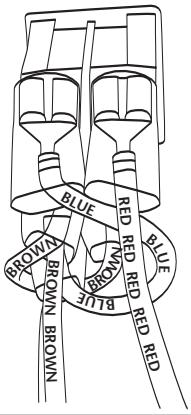
a) Attach the first plug on the brown wire to the middle left spade.

b) Attach the first plug on the blue wire to the lowest left spade. Wait to attach the last blue plug.

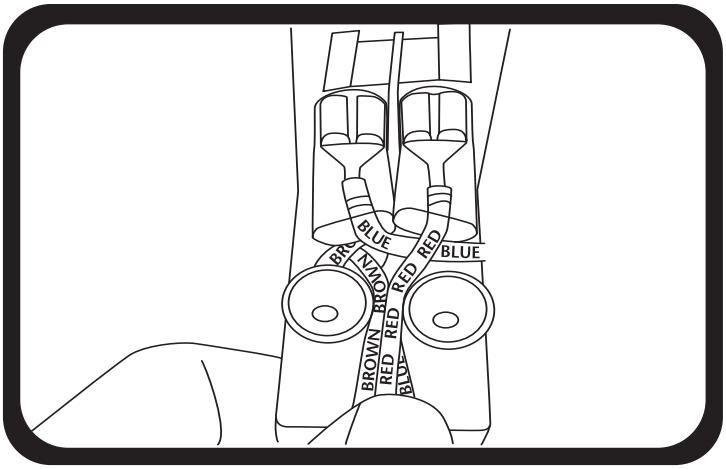
c) Wrap the second brown plug underneath blue and attach to the middle right spade.

d) Attach the last blue plug to the upper right spade. The bottom right spade will remain unattached.

e) Connect the red wire to the top right spade.



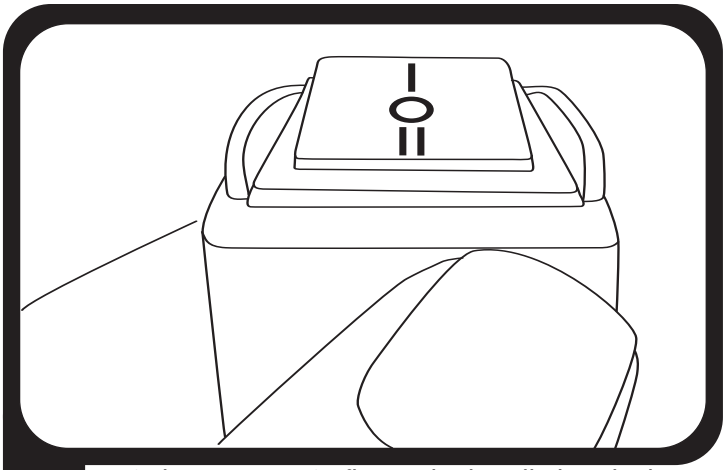
6. When finished with steps a through e your final wire connection configuration should appear as above.



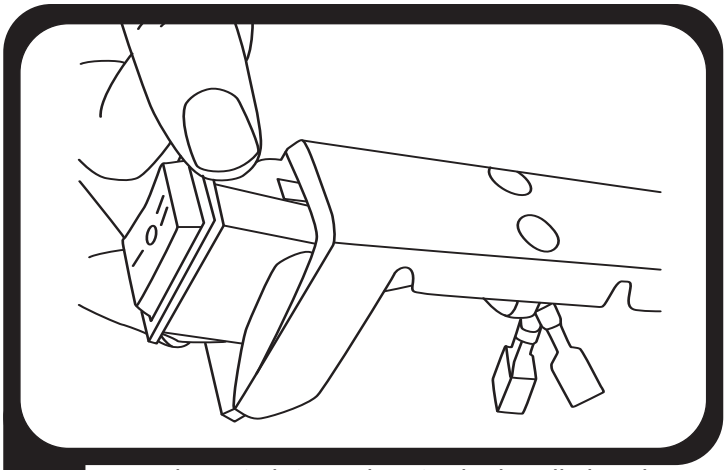
Install the switch into the handle bezel. Place the long BLUE, BROWN, then RED wires between the screw bosses in that order (as shown). BROWN and BLUE wire loops must be positioned above the screw bosses on the handle bezel as shown.

(Continued on page 38)

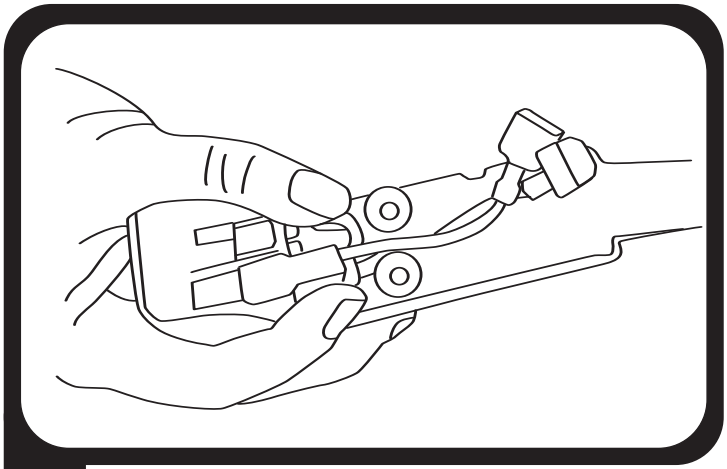
HANDLE ASSEMBLY (CONTINUED FROM PG. 37)



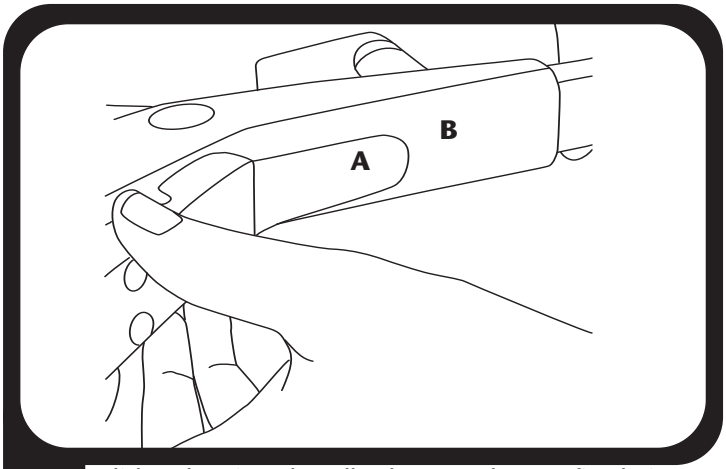
7. Switch must remain flat to the handle bezel when installed into handle body as shown.



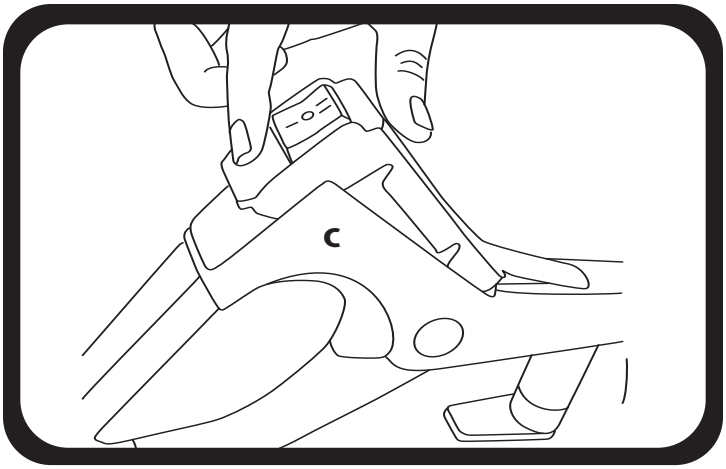
8. Press the switch into place in the handle bezel. The II position should be closest to the front of the bezel.



9. Lay the long red, brown and blue wires between the circular shoulders and gently place handle bezel into handle.



10. Slide tab A into handle slot B and press firmly into place at C. Be sure all switch wires are routed between screw bosses to ensure that the wires do not get damaged. Insert screws into bezel (fig. 9).



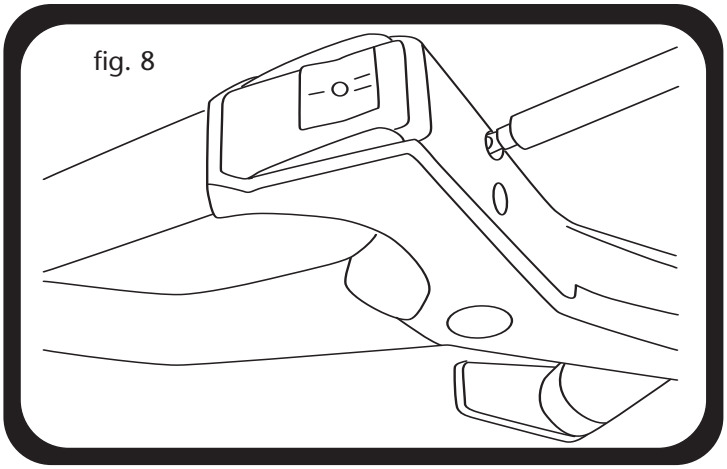
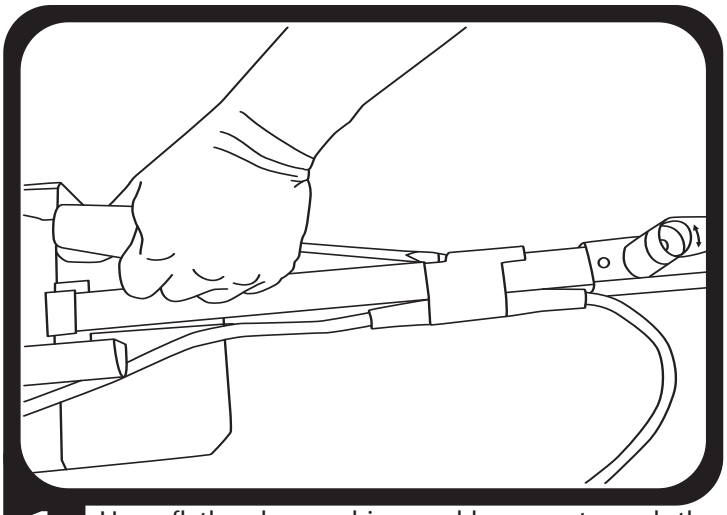
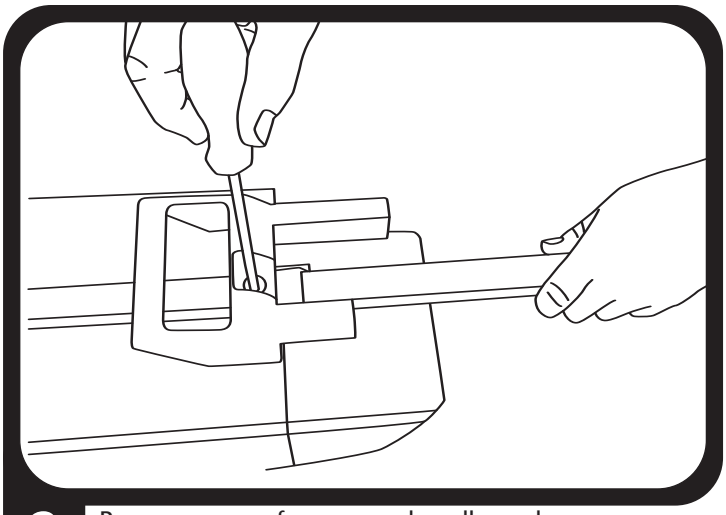


fig. 8

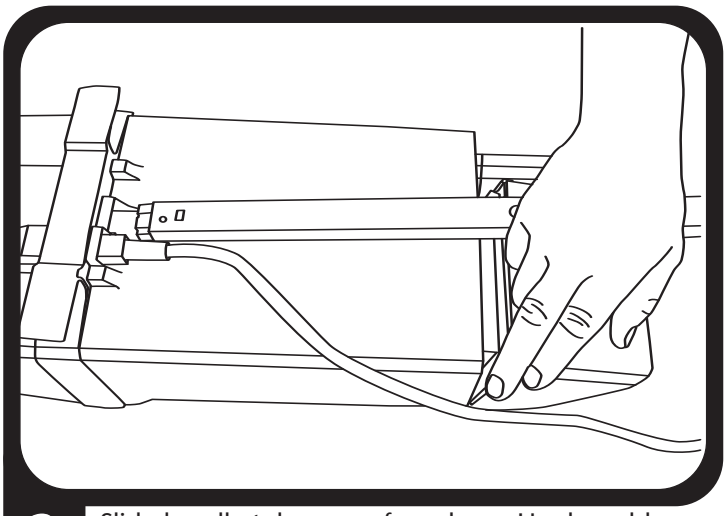
NEW CORD AND STRAIN RELIEF REPLACEMENT



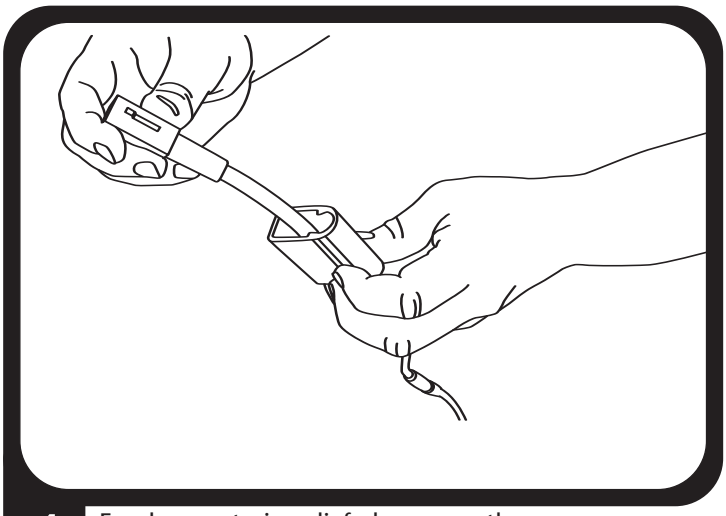
1. Use a flathead screwdriver and hammer to push the strain relief towards the handle. Snap off remaining strain relief.



2. Remove screw from carry handle and remove carry handle.



3. Slide handle tube away from base. Unplug old power cord.

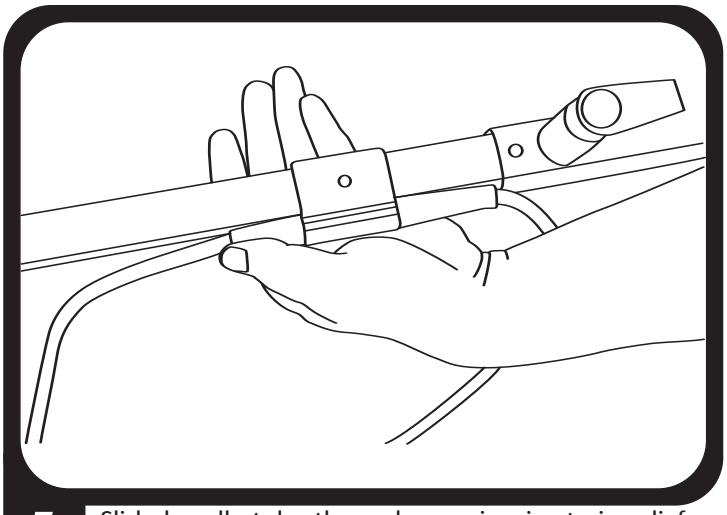


4. Feed new strain relief clasp over the new power cord. Slide strain relief up to the groove on the power cord and snap strain relief clasp into place.

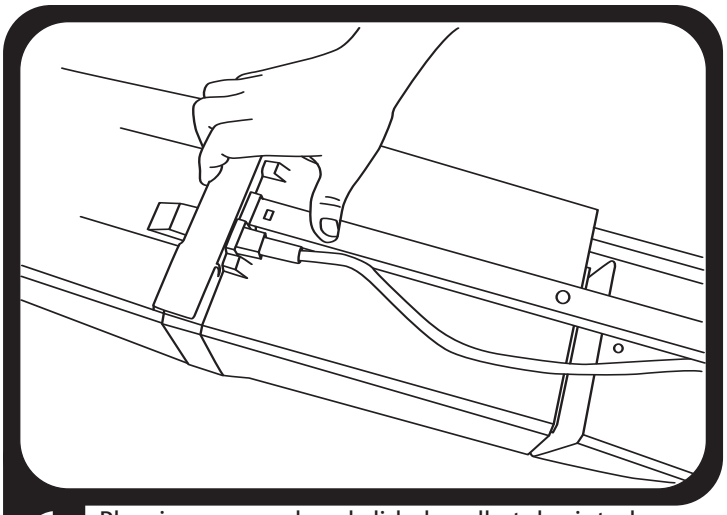
NOTE: Use care when sliding the strain relief clasp over the handle tube bushing so as not to damage bushing.

(Continued on page 40)

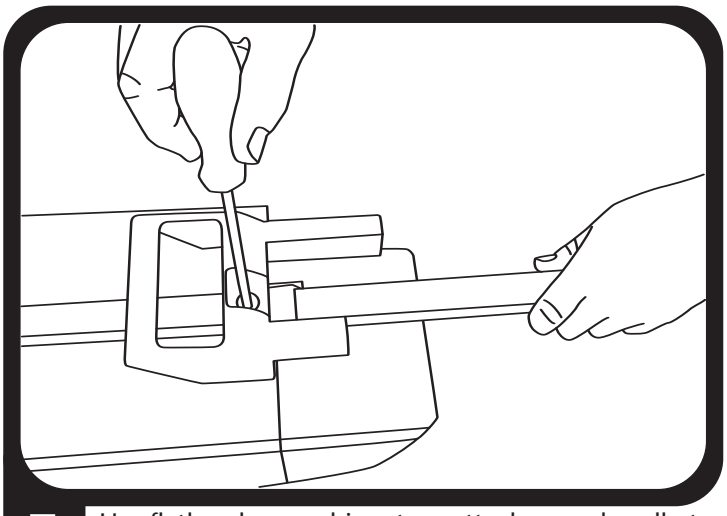
NEW CORD AND STRAIN RELIEF REPLACEMENT (CONTINUED FROM PAGE 39)



5. Slide handle tube through opening in strain relief. Align holes on strain relief and handle tube. Insert new ratchet fastener in hole and push flush.

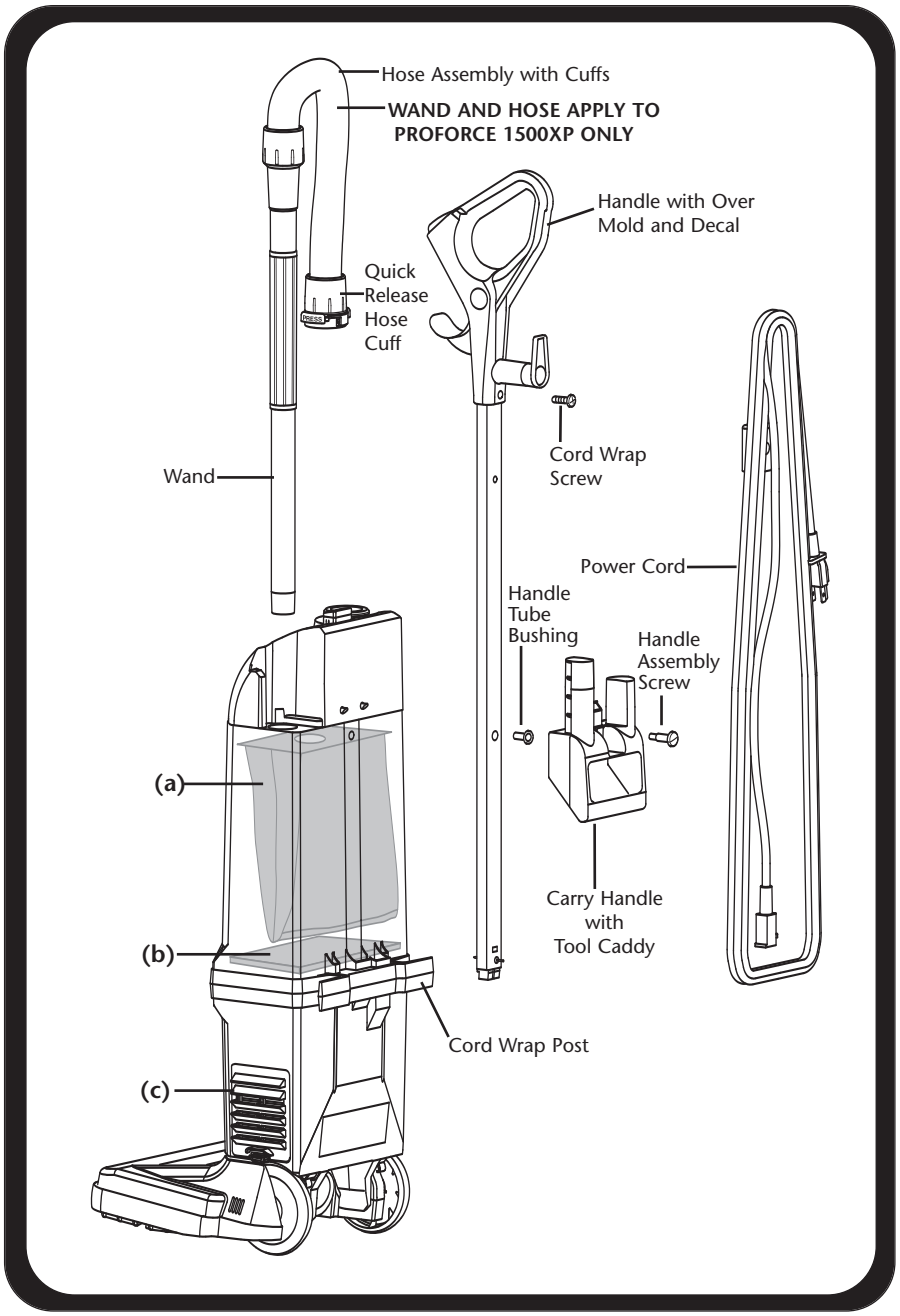


6. Plug in new cord and slide handle tube into base.



7. Use flathead screwdriver to reattach carry handle to handle tube.

ASSEMBLY



1. Install all 3 filters:
(a) Intercept Micro Filter
(b) Motor Intake Filter
(c) Exhaust Filter

2. Install Power Cord and Handle with Over Mold and Decal.
Attach with Handle Tube Bushing and Carry Handle with Tool Caddy.

3. Wrap Power Cord around Cord Wrap Post.

Troubleshooting–Clearing Hose and Wand Obstructions

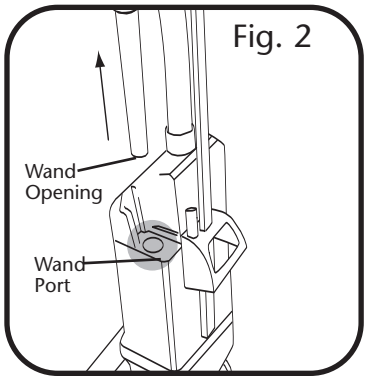
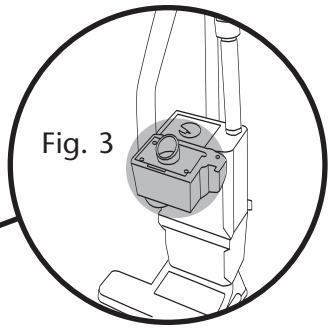
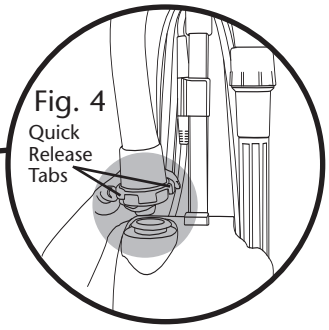
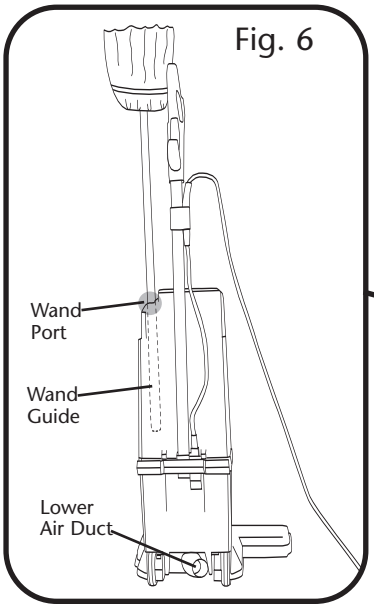
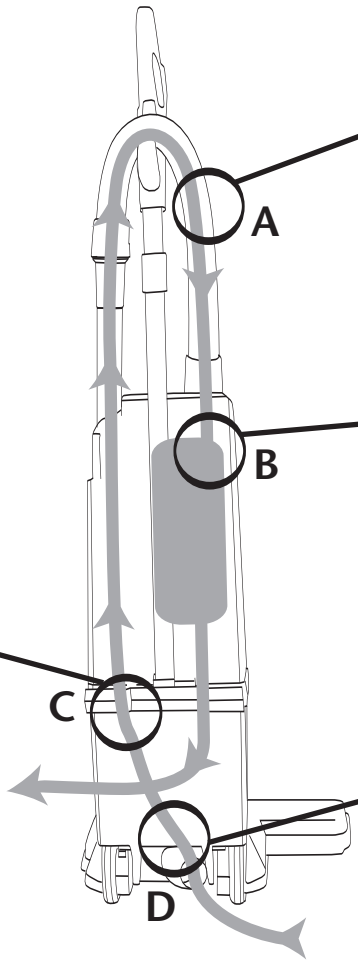


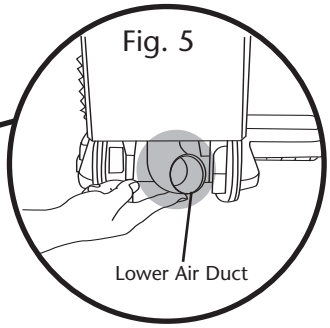
Fig. 1 – Airflow path and possible obstruction locations











1. Familiarize yourself with air flow path and possible obstruction locations (Fig 1).

2. To determine obstruction location, remove wand from port. (Fig 2). Turn on vacuum and place hand over wand opening to check for proper suction. If no suction exists, blockage is at location A or B (as shown in Fig 1) and proceed to Step 3. If there is proper suction, the blockage is at location C or D (as shown in Fig 1) and proceed to Step 5.

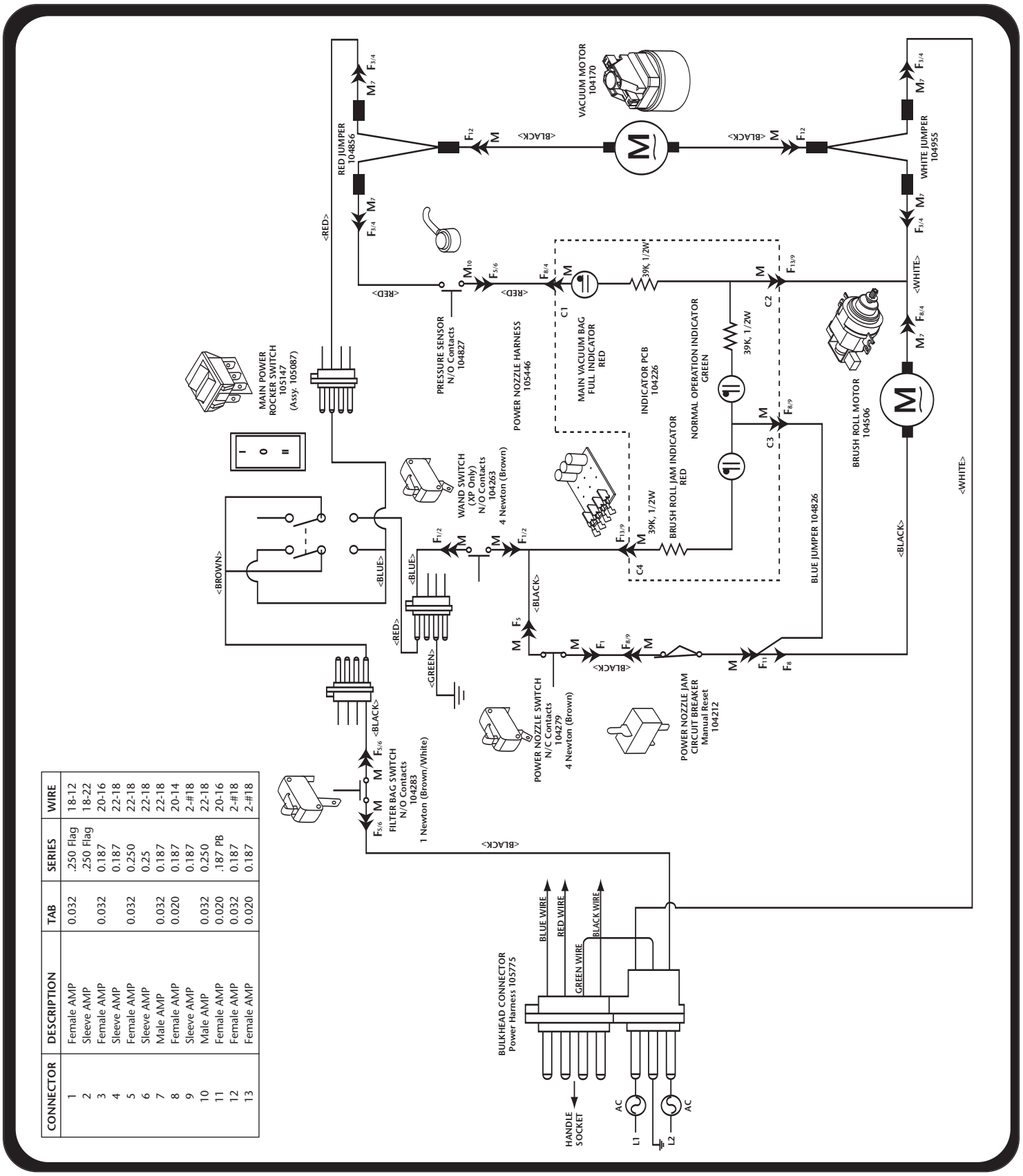
3. Open Bag Housing Cover (Fig. 3) and replace Intercept Micro Filter. A full filter will restrict airflow.

4. Remove hose from the bag housing cover by using the quick release tabs. (Fig. 4). Look into upper hose and wand. Shake or insert broom handle to clear any visible debris. Replace hose and wand on vacuum.

5. If blockage is not in the wand or upper hose, disconnect the lower air duct hose on the back of the power nozzle (Fig 5). Visually check the lower air duct hose for debris and remove. To check for unobstructed air flow, turn on vacuum and place hand over opening on lower air duct. If you feel proper suction, reconnect lower air duct and resume vacuuming. If blockage is not in lower air duct hose, proceed to step 6.

6. With bottom air duct hose and upper hose and wand disconnected, carefully insert a broom handle (or any similar item like a short length of hose, pipe, etc) approximately 14 inches into wand guide on top of vacuum housing (Fig. 6) to dislodge obstruction or debris. Debris should then drop or move into the lower air duct where you can then remove it with your hand (Fig 5).

7. Reconnect the lower air duct and upper hose assembly, and power on the vacuum.



CONNECTOR	DESCRIPTION	TAB	SERIES	WIRE
1	Female AMP	0.032	.250 Flag	18-12
2	Sleeve AMP		.250 Flag	18-22
3	Female AMP	0.032	0.187	20-16
4	Sleeve AMP		0.187	22-18
5	Female AMP	0.032	0.250	22-18
6	Sleeve AMP		0.25	22-18
7	Male AMP	0.032	0.187	22-18
8	Female AMP	0.020	0.187	20-14
9	Sleeve AMP		0.187	2-#18
10	Male AMP	0.032	0.250	22-18
11	Female AMP	0.020	.187 PB	20-16
12	Female AMP	0.032	0.187	2-#18
13	Female AMP	0.020	0.187	2-#18

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